

APPENDIX-IV

Existing National, Regional or Local Requirements for ballast
water management plan

National Ballast Water Management Requirements

We have gathered details of as many as possible of the known requirements for ballast management. A notable feature of individual texts is the complex legal format which varies from country to country. The following pages provide extracts in a standard format, and are intended to be a guide to concerned officers including master. In case of doubt, the original document should always be consulted.

Whenever possible, a copy of a specific reporting form has been included.

Masters are requested to require the latest information on this matter to your agent

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1) UNITED STATES OF AMERICA

- National
- Washington State
- California State

2) CANADA

- National
- Vancouver

3) AUSTRALIA

4) NEW ZEALAND

5) BRAZIL

6) ARGENTINA

7) CHILE

8) UNITED KINGDOM

9) ISRAEL

1) UNITED STATES OF AMERICA

NATIONAL REQUIREMENT

Country: U.S.A.

National Monitoring Authority: US Coast Guard (USCG).

Ports affected: All

Ships affected: Any vessel equipped with ballast tanks, that is bound for ports or places in U.S. water exempted as follow

- Vessels that operate exclusive within one COTP ZONE
- Crude Oil Tanker in coastwise trade
- Vessels belong to any USA Government

Implementation: Mandatory

Date of start: 2004

Methods acceptable:

1. Ballast water exchange at sea, outside US EEZ.
2. Ballast water exchange in designated sea area within US EEZ.
3. Environmentally sound alternative ballast water management methods which can include modifications to a ship.

Unwanted aquatic organisms or pathogens: Not defined.

Uptake control measures: None specified.

Sampling required: Not defined.

BWM Reporting : Master or Agent must send BWM report as USCG form 24hour prior to entry (See U.S. BWM reporting requirement)

Records required: Vessel must keep BWM & report on board for a minimum of TWO years

The US has issued a format for recording the status of ballast.

Procedure if en route management is not possible: [not yet known]

Procedure if ballast water found to be unacceptable after sampling

Not yet known; controls are still voluntary.

For further information refer to: US Invasive Species Act. 1996

Attachments :

-Coast Guard Ballast Water Management Program

-Completion Instructions For Ballast Water Reporting Form

-Ballast water reporting form & Sample

U.S. BWM REPORTING REQUIREMENT

Reporting / 33CFR 151.2041

Any vessel equipped with ballast water tanks, that is bound for ports or places in U.S. water must ensure complete and accurate BWM reports are submitted to NBIC except special case (If bound for "The Great Lakes" "Hudson River north of the George Washington Bridge"), also the ships that not discharging ballast water or declare NOBOB (no ballast on board) must submit BWM report

The reports must be submitted for all voyages where a vessel enters a COTP zone where from another COTP zone or from outside the EEZ (No need of report in same COTP zone)

Recipient of Ballast Water Management Report (NATIONAL)

USCG (National ballast water management reporting)			
Destination	Great Lakes	Hudson river north of George Washington Bridge	All other United States ports
When	24hrs prior to entry (If voyage is less than 24hrs, report before departure of last port)		
Who	Master of through agent		
Where	COTP Buffalo,Massena Detachment	COTP New York	Commandant, U.S. Coast Guard
How	Fax 315-769-5032	Fax 718-354-4249	E-Mail (nbic@ballastreport.org) Fax 31-261-4319

Recipient of Ballast Water Management Report (STATE)

State	CALIFORNIA	WASHINGTON	OREGON
When	24hrs prior to entry (If voyage is less than 24hrs, report before departure of last port)		
Who	Master of through agent		
Where	CSLC (California State Lands Commission)	WDFW (Washington Department of Fish and Wildlife)	Merchants Exchange of Portland
How	E-Mail bwform@slc.ca.gov Fax +1-562-499-6444	E-Mail ballastwater@dfw.wa.gov Fax +1-360-902-2845 Tel +1-360-92-2741	Email ballastwater@pdxmex.com Fax +1-503-295-3660

! If you enter following stat, send BWM report separately with NBIC's, using NBIC form

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Enclosure (1) to NAVIGATION AND INSPECTION CIRCULAR 07-04

**BALLAST WATER MANAGEMENT (BWM)
REPORTING AND RECORDKEEPING GUIDANCE**

Introduction.

This enclosure explains the Ballast Water Management (BWM) reporting and recordkeeping requirements of 33 CFR 151, subpart D, as amended by the June 14, 2004 final rule; and provides guidance for foreign and domestic vessel owners, operators, agents, and persons-in-charge for complying with these requirements. The final rule titled "Penalties for Non-submission of Ballast Water Management Reports," implements a maximum \$27,500 a day Civil Penalty and Class C Felony provisions for failing to submit BWM reports and failing to maintain BWM records. The final rule also expands existing BWM reporting and recordkeeping requirements to include all vessels equipped with ballast water tanks that transit to any U.S. port or place of destination, regardless of whether the vessel operated outside the Exclusive Economic Zone (EEZ) of the U.S. or equivalent zone of Canada.

For the purpose of the BWM requirements:

Port or place of destination means any port or place where a vessel is bound to anchor or moor; and

Ballast tank means any tank or hold on a vessel used for carrying ballast water, whether or not the tank or hold is designed for that purpose.

A. Applicability.

The master, owner, operator or person-in-charge of any vessel equipped with ballast water tanks, that is bound for ports or places in U.S. waters, must ensure complete and accurate BWM reports are submitted in accordance with 33 CFR 151.2041, and signed BWM records are kept on board the vessel for a minimum of two years in accordance with 33 CFR 151.2045. Shipping agents of vessels operating in U.S. waters should, where possible, facilitate efforts to submit complete, accurate and timely reports.

1. Exemptions.

As amended, the only vessels that are exempt from the mandatory BWM requirements under 33 CFR 151.2010 are:

- Vessels that operate exclusively within one COTP zone;
- Crude oil tankers engaged in coastwise trade; and
- Vessels of the Department of Defense, Coast Guard, or any of the Armed Services as defined within 33 USC 1322 (a) and (n).

2. Great Lakes and Hudson River Applicability.

Prior to the publication of the "Penalties for Non-submission of Ballast Water Management Reports" final rule, there were no penalty provisions in the regulations for noncompliance with the regional BWM requirements of the Great Lakes and Hudson River, north of the George Washington Bridge. This final rule establishes penalties for noncompliance with the BWM requirements of the Great Lakes, Hudson River, and all ports or places in U.S. waters. It also establishes new reporting requirements for those vessels that declare no ballast on board

(NOBOB), and for transits that occur between all COTP zones, including zones in the Great Lakes.

3. Vessels Engaged in the Foreign Export of Alaskan North Slope Crude Oil.

The BWM reporting and recordkeeping requirements, and associated penalties, extend to vessels engaged in the foreign export of Alaskan North Slope Crude Oil. These vessels must ensure compliance with the reporting and recordkeeping provisions of 33 CFR 151.2041 and 151.2045 (outlined in this Enclosure) in addition to the requirements of 15 CFR 754.2(j)(3) (not addressed within this Enclosure).

B. BWM REPORTING GUIDANCE.

1. Reporting Requirements for all U.S. Ports or Places (33 CFR 151.2041).

All vessels, both foreign and domestic, that are bound for ports or places in the U.S. and are equipped with ballast water tanks, must submit BWM reports, regardless of whether the vessel operated outside the U.S. EEZ. This includes those ships that declare NOBOB and ships not discharging ballast.

The reports must be submitted for all voyages where a vessel enters a COTP zone (whether from another COTP zone or from outside the EEZ) to anchor or moor, but not for voyages to ports or places solely within a single COTP zone. Diagrams of the Coast Guard COTP zones, with a list of common U.S. ports within each zone, are provided in Appendix A to Enclosure (1) of this NVIC to help determine when a BWM report must be submitted. For example, if a vessel transits from Miami, FL, to Key West, FL, a BWM report does not have to be submitted if the voyage keeps the vessel inside the COTP Miami zone. However, if the same vessel transits outside of the COTP Miami zone and back in, or transits from Miami to Port Canaveral, FL (COTP Jacksonville zone), a BWM report must be submitted.

Each report that is submitted must only include BWM information specific to an individual voyage. Single reports that cover more than one voyage are not allowed. The master, owner, operator, agent and person-in charge are responsible for ensuring that the BWM reports are submitted either: 24 hours before arrival to the U.S. port or place of destination if the voyage is more than 24 hours; or before departing the port or place of departure if the voyage is less than 24 hours (see Table 1).

2. Great Lakes and Hudson River Reporting Requirements.

Upon entry to the Great Lakes or Hudson River, north of the George Washington Bridge, after operating outside the U.S. EEZ, regional BWM reports must continue to be submitted in accordance with 33 CFR 151.2041 (a) (1) and (2) respectively. Vessels operating inside the Great Lakes, or entering the Great Lakes without transiting outside the U.S. EEZ, however, must now submit BWM reports to the NBIC for all U.S. ports or places in accordance with 33 CFR 151.2041(a)(3) and the guidance provided within this Enclosure (see Table 1).

TABLE 1:**Where to send this form** [reprinted from 33 CFR Part 151, Subpart D, Appendix]

Vessels equipped with ballast water tanks bound for all ports or places within the waters of the United States after operating outside the EEZ (which includes the equivalent zone of Canada).

<u>Bound for</u>	<u>You must submit your report as detailed below.</u>
The Great Lakes	<p>Fax the information at least 24 hours before the vessel arrives in Montreal, Quebec, to the USCG COTP Buffalo, Massena Detachment (315-764-3283) or to the Saint Lawrence Seaway Development Corporation (315-764-3250).</p> <p>In lieu of faxing, vessels that are not U.S. or Canadian flagged may complete the ballast water information section of the St. Lawrence Seaway "Pre-entry Information from Foreign Flagged Vessel Form".</p>
Hudson River north of the George Washington Bridge	<p>Fax the information to the COTP New York at (718-354-4249) at least 24 hours before the vessel arrives at New York, New York.</p> <p>* Note: Vessels entering COTP New York Zone which are not bound up the Hudson River north of George Washington Bridge should submit the form in accordance with the instructions in the following block.</p>
All other U.S. Ports	<p>Report before departing the port or place of departure if voyage is less than 24 hours, or at least 24 hours before arrival at the port or place of destination if the voyage exceeds 24 hours; and submit the required information to the National Ballast Information Clearinghouse (NBIC) by one of the following means:</p> <p>Via the Internet at http://invasions.si.edu/ballast.htm; E-mail to NBIC@BALLASTREPORT.ORG; Fax to 301-261-4319; or Mail the information to U.S. Coast Guard, c/o SERC, P.O. Box 28, Edgewater, MD 21037-0028.</p>

Vessels that have not operated outside the EEZ, which are equipped with ballast water tanks and are bound for all ports or places within the waters of the United States.

<u>Bound for</u>	<u>You must submit your report as detailed below:</u>
All U.S. ports including the Great Lakes and Hudson River North of George Washington Bridge	<p>Report before departing the port or place of departure if voyage is less than 24 hours, or at least 24 hours before arrival at the port or place of destination if the voyage exceeds 24 hours; and submit the required information to the National Ballast Information Clearinghouse (NBIC) by one of the following means:</p> <p>Via the Internet at http://invasions.si.edu/ballast.htm; E-mail to NBIC@BALLASTREPORT.ORG; Fax to 301-261-4319; or Mail to U.S. Coast Guard, c/o SERC, P.O. Box 28, Edgewater, MD 21037-0028.</p>

If any information changes, send an amended form before the vessel departs the waters of the United States.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The Coast Guard estimates that the average burden for this report is 35 minutes. You may submit any comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to: Commandant (G-MSO), U.S. Coast Guard, 2100 Second St. SW, Washington, DC 20593-001, or Office of Management and Budget, Paperwork Reduction Project (2115-0598), Washington, DC 20503

3. Online Reporting.

Online reporting via the NBIC website, or e-mail attachments downloadable from the NBIC website, are the preferred methods for submitting *Ballast Water Reporting Forms*. Reporting via these methods helps ensure the correct information is transmitted and eliminates many of the common problems associated with submitting reports via other methods. In addition, use of the NBIC online reporting methods provides the user with proof of receipt messages that can be printed and kept on board with the ship's BWM records. These messages provide proof that a *Ballast Water Reporting Form* was submitted to NBIC and helps streamline the Coast Guard BWM verification process.

When submitting *Ballast Water Reporting Forms* online, the responsible officer's name and title may be printed in Section 6 without a signature, however, the required onboard BWM records must be signed. Therefore, the best way to meet both the reporting and recordkeeping requirements is to print out the submitted form, sign it, and keep it on board the vessel for the required two year period.

To submit a report via the NBIC website, or download the appropriate form to submit as an e-mail attachment, visit: <http://invasions.si.edu/NBIC/bwform.html>

4. Alternative Reporting Methods.

a. Fax Reporting.

Submitting BWM reports via fax, although acceptable, can present problems for those submitting the report and those who must interpret and enter the report data into the national database. Reports submitted via fax do not provide the sender with a "proof of receipt." Faxed reports are also often incomplete and unreadable due to bad fax transmissions and/or poor handwriting. When an illegible *Ballast Water Reporting Form* is received, the report is not accepted by the NBIC and the vessel is considered out of compliance with the requirements. Since most fax machines available provide senders with a transmittal report, if the report is sent by fax, the sender should keep a copy of the transmittal report with their BWM records. Fax transmittal reports provide evidence that an attempt was made to submit a *Ballast Water Reporting Form* and will help in the Coast Guard verification process. Fax transmittal records, however, will not prevent a vessel from undergoing an expanded BWM exam if the vessel develops a history of not reporting due to unreadable fax transmissions.

b. Postal Service/ Mail-in Reporting.

As a last resort, BWM reports may be submitted via normal postal service. This method is the least desirable due to time, costs and report quality concerns. If a *Ballast Water Reporting Form* is sent by mail, the sender should consider sending the report "certified, return receipt," ensure the date and times of the report are marked, and keep the receipt card on board with the required BWM records. Return receipt cards provide proof that *Ballast Water Reporting Forms* have been submitted to NBIC and help streamline the Coast Guard BWM verification process. If a return receipt is not received after a reasonable period, the mailer may request a delivery record using a Postal Service Form 3811-A.

5. Report Format, Content and Discrepancies.

Submitted reports must be complete, accurate and prepared in accordance with the instructions listed in the Appendix to 33 CFR 151, subpart D. If ballast conditions change after a report is submitted, an amended form must be provided to the NBIC. Each report must also include all the information listed in 33 CFR 151.2045 and be in the correct format. The only report formats that meet the mandatory BWM reporting requirements are: the *Ballast Water Reporting Form* (OMB form Control No. 1625-0069) found in the Appendix to 33 CFR 151, subpart D; the online versions found at the NBIC website; and the St. Lawrence Seaway "Pre-entry Information from Foreign Flagged Vessel Form" (for vessels entering the Great Lakes after operating beyond the EEZ). Customized forms, forms that have been altered, forms that have logos or other information attached, and online forms that are not in the electronic format found at the NBIC website, are not acceptable.

Incomplete, illegible, or erroneous reports may subject the vessel to Coast Guard enforcement action. To prevent being placed on a BWM lookout list due to incomplete or incorrect reporting, masters, owners, operators, agents, and persons-in-charge should adhere to the guidance in Table 2 in addition to the instructions listed in the Appendix to 33 CFR 151, subpart D.

TABLE 2:

How to avoid the common problems associated with submitting *Ballast Water Reporting Forms* to the NBIC.

Form Section	Description	Problems associated with the different reporting methods				
		Web	PDF (e-mail)	Word (e-mail)	Fax	Postal
All	No parts of the form should be cut off.				X	X
All	All information must be legible.				X	X
1, 2	Ship and voyage information must be complete and accurate.	X	X	X	X	X
1, 2, 3, 4	All fields in Sections 1-4 of the form must be filled out.		X	X	X	X
3, 4	Sections 3 and 4 of the form (the fields that ask for the number of tanks) must be filled out with a number, not words, volumes, or names of tanks.			X	X	X
5	Section 5 of the form must only be completed if the ship plans on discharging ballast in U.S. waters during the reported on voyage. If ballast water is to be discharged, then entries in Section 5 must contain both the source water and discharge water (at a minimum) plus managed water (ie. exchanged water), if applicable. You cannot have a <i>BW Management Practices</i> entry without a <i>BW Source</i> entry. If the ballast water was taken on at sea, not exchanged, that information belongs in the source column, not in the <i>BW Management Practices</i> column.	X	X	X	X	X
5	In the <i>BW Source</i> column of Section 5, if a tank to be discharged has multiple sources, ensure that the three largest sources of ballast water taken on in the last 30 days are listed.	X	X	X	X	X
4	The number of tanks discharged in Section 4 of the form should match the discharge information in Section 5.			X	X	X
5	Only enter one tank per line in Section 5 of the form unless the tanks are port and starboard pairs with <i>identical</i> ballast water histories.	X	X	X	X	X
2, 5	Enter all dates in Sections 2 and 5 as DD/MM/YYYY. Do not enter date ranges (see instructions in Encl. (1)).				X	X
2, 5	Do not abbreviate the names of ports in Sections 2 or 5 of the form.	X	X	X	X	X
5	When filling in Section 5, the "ENDPOINT LAT. LONG." field should be filled in with a latitude and longitude not a port	X	X	X	X	X

C. BWM RECORDKEEPING GUIDANCE.

1. Onboard Recordkeeping Requirements (33 CFR 151.2045).

All vessels that are required to submit BWM reports under 33 CFR 151.2041 must also keep BWM records on board for a minimum of two years. These records must be made available to the Coast Guard upon request as specified by 33 CFR 151.2050(b).

The onboard BWM records must address all the information described in 33 CFR 151.2045 and have entries for each voyage where the vessel enters a COTP zone (including those between COTP zones within the Great Lakes) to anchor or moor. Each record must also be signed by the master, owner, operator, person-in-charge, or responsible officer to certify the accuracy of the record.

Retaining signed copies of properly completed (and submitted) *Ballast Water Reporting Forms* is the best way to satisfy both the reporting and recordkeeping requirements and ensure compliance. Ballast water logs or record books that contain all of the required information listed in 33 CFR 151.2045, whether they are separate documents or integrated with other record systems, may also meet the requirements, provided they are complete, accurate and consistent with the information submitted within the BWM reports.

**Appendix A – U.S. Coast Guard Captain of the Port Zones (COTPZ)
and
Common U.S. Ports**

Figure A-1: East Coast COTP Zones

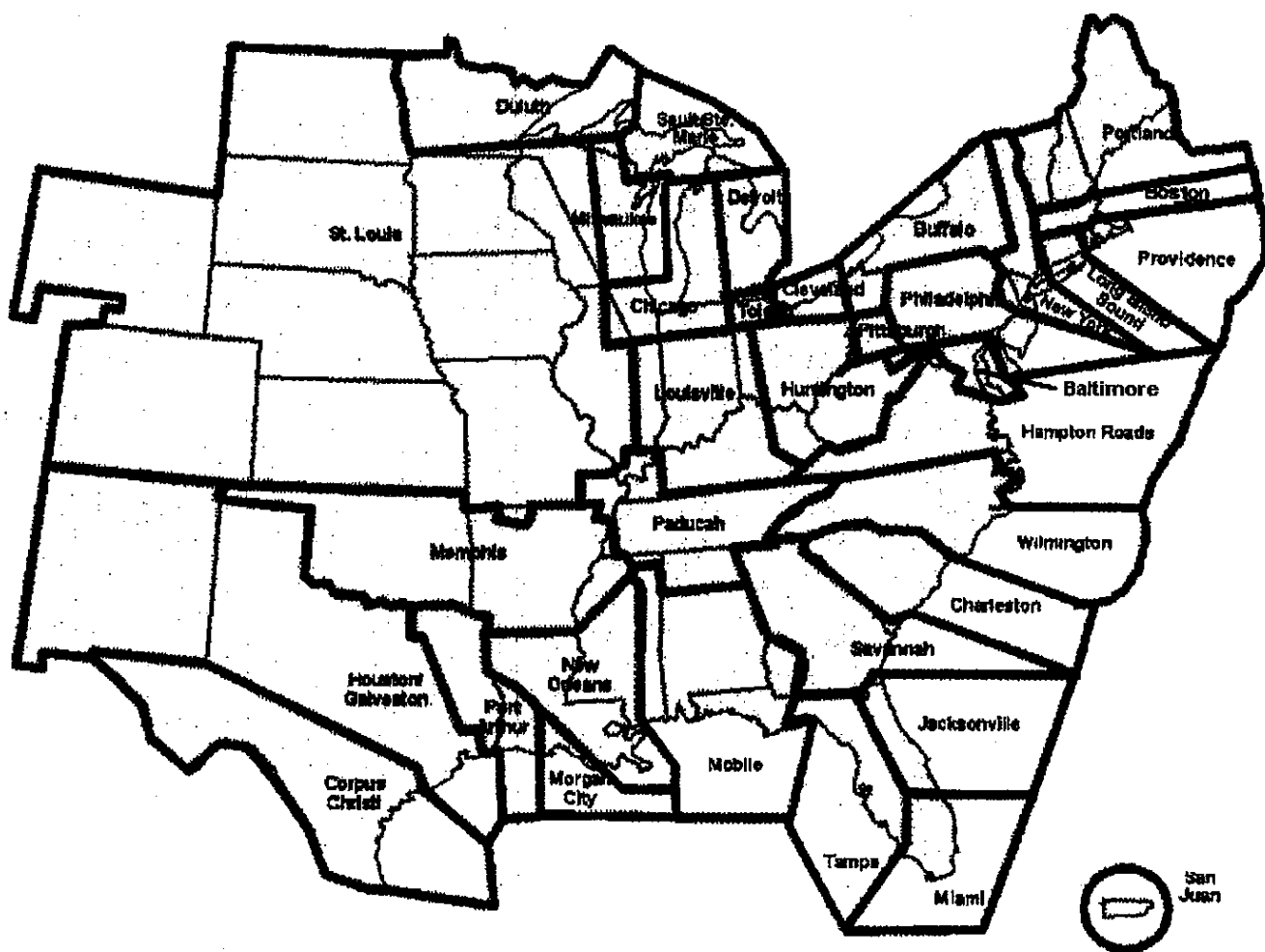


Figure A-3: West Coast COTP Zones

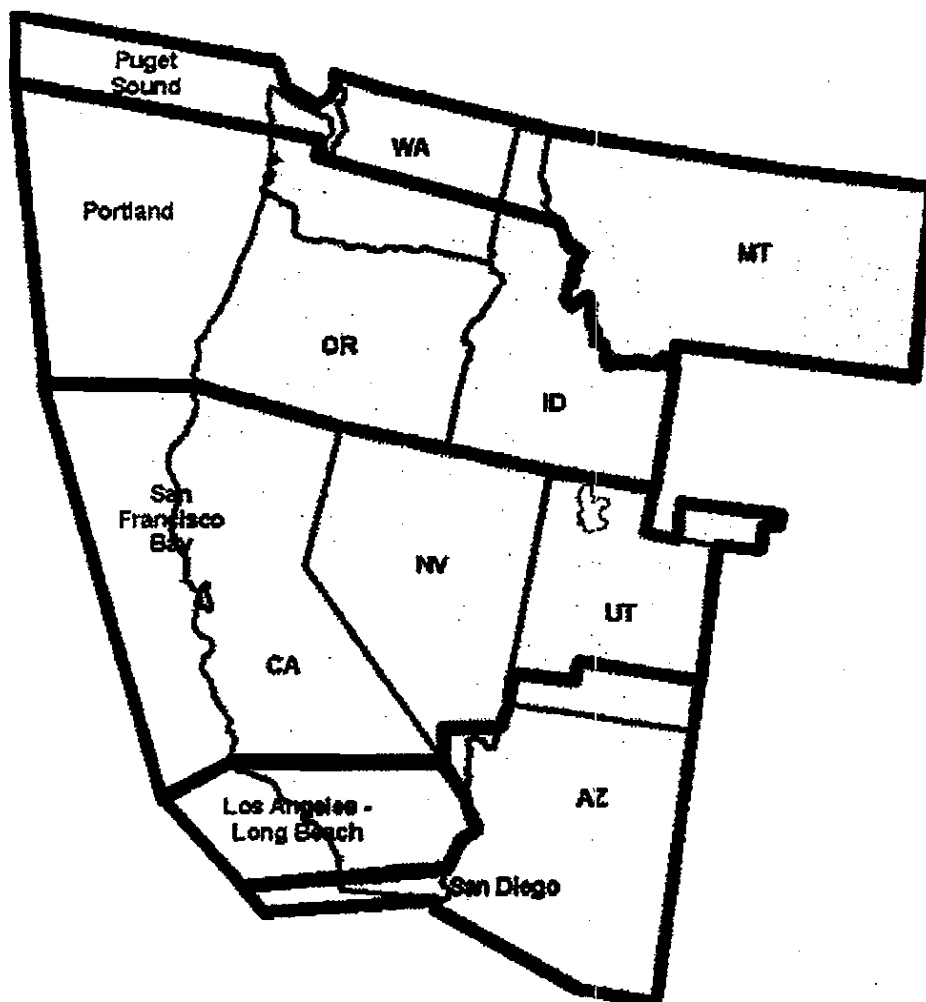


Figure A-3: COTP Zones in Alaska

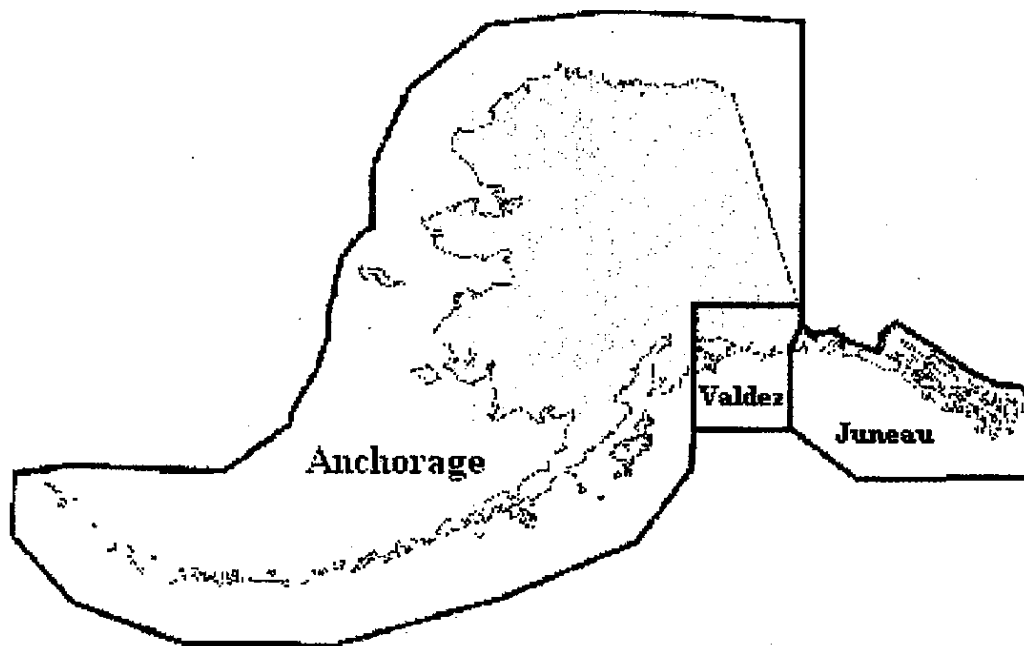


Table A-1: List of Coast Guard COTP Zones and Common U.S. Ports

COTP Zone	U.S. Port	COTP Zone	U.S. Port
Jacksonville	Jacksonville, FL	New Orleans	New Orleans, LA
	Fernandina Beach, FL		Baton Rouge, LA
Charleston	Melbourne, FL		Lake Providence, LA
	Port Canaveral, FL		Port of Madison Parish, LA
	St. Augustine, FL		Port of Plaquemines, LA
Savannah	Charleston, SC		Port of South Louisiana, LA
	Georgetown, SC		Natchez, MS
San Juan	Port Royal, SC		Vicksburg, MS
	Savannah, GA	MSU Lake Charles	Lake Charles, LA
Tampa	Brunswick, GA	Houston	Houston, TX
	San Juan, PR	Galveston	Galveston, TX
	Arecibo, PR		Freeport, TX
	Fajardo, PR	Mobile	Texas City, TX
	Guanica, PR		Mobile, AL
	Mayaguez, PR		Dauphin Island, AL
	Ponce, PR		Panama City, FL
	Christiansted, St Croix, VI		Pensacola, FL
	St. Thomas, VI		Port St. Joe, FL
Miami	Tampa, FL		Biloxi, MS
	Cedar Key, FL		Gulfport, MS
	Charlotte, FL		Pascagoula, MS
	Fort Myers Beach, FL		Pass Christian, MS
	St. Petersburg, FL	Memphis	Memphis, TN
Corpus Christi	Weedon Island, FL		Greenville, MS
	Miami, FL		Rosedale, MS
	Carrabelle, FL	Pittsburgh	Helena, AR
	Fort Pierce, FL		Tulsa - Port of Catoosa, OK
	Key West, FL	St. Louis	Pittsburgh, PA
Port Arthur	Palm Beach, FL	Huntington	St. Louis, MO & IL
	Port Everglades, FL		Kansas City, MO
	Corpus Christi, TX		Minneapolis, MN
	Aransas Pass, TX	Louisville	St. Paul, MN
	Brownsville, TX		Huntington, WV
	Matagorda Ship Channel,		Louisville, KY
Port Arthur	Port Isabel, TX	Paducah	Cincinnati, OH
	Rockport, TX		Mount Vernon, IN
	Victoria, TX		Nashville, TN
	Port Arthur, TX		Chattanooga, TN
	Beaumont, TX		Knoxville, TN
	Orange, TX		Guntersville, AL
	Sabine Pass, TX		

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COTP Zone	U.S. Port	COTP Zone	U.S. Port
New York	New York, NY & NJ Albany, NY Hempstead, NY Rondout, NY Tarrytown, NY	Providence	Providence, RI Newport, RI Bourne, MA Chatham, MA Cuttyhunk Harbor, MA Edgartown, MA Fall River, MA Falmouth, MA Mattapoisett, MA Nantucket, MA New Bedford, MA Provincetown, MA Vineyard Haven, MA Wareham, MA Wellfleet, MA
Boston	Boston, MA Beverly, MA Cohasset, MA Duxbury, MA Gloucester, MA Green Harbor, MA Lynn, MA Manchester, MA Marblehead, MA Newburyport, MA Plymouth, MA Rockport, MA Salem, MA Scituate, MA	Hampton Roads	Hampton Roads, VA Alexandria, VA Cape Charles, VA Chincoteague, VA Hopewell, VA Horn Harbor, VA Richmond, VA Winter Harbor, VA Ocean City, MD
Long Island Sound	New Haven, CT Bridgeport, CT Greenwich, CT New London, CT Norwalk, CT Stamford, CT Greenport, NY Hay, NY Mattituck, NY Northport, NY Port Jefferson, NY	Philadelphia	Philadelphia, PA Chester, PA Marcus Hook, PA Camden, NJ Gloucester, NJ Paulsboro, NJ Penn Manor, PA Trenton, NJ New Castle, DE Wilmington, DE
Portland, ME	Portland, ME Belfast, ME Boothbay Harbor, ME Bucksport, ME Carvers Harbor, ME Corea Harbor, ME Eastport, ME Matinicus, ME Northeast Harbor, ME Rockland, ME Rockport, ME Searsport, ME South Bristol, ME Southwest Harbor, ME Stonington, ME Portsmouth, NH Hampton, NH	Baltimore	Baltimore, MD Annapolis, MD Cambridge, MD Crisfield, MD St. Michaels Harbor, MD Tilghman Island, MD Washington, DC
		Wilmington	Wilmington, NC Avon, NC Beaufort, NC Belhaven, NC Edenton, NC Morehead City, NC Wanchese, NC

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COTP Zone	U.S. Port	COTP Zone	U.S. Port
Chicago	Chicago, IL	Toledo	Toledo, OH
	Waukegan, IL		Huron, OH
	Buffington, IN		Kelleys Island, OH
	Burns Waterway Harbor, IN		Marblehead, OH
	Gary, IN		Put-In-Bay, OH
	Indiana Harbor, IN		Sandusky, OH
	Frankfort, MI		Monroe, MI
	Grand Haven, MI	Sault Ste. Marie	Sault Ste. Marie, MI
	Holland, MI		Alpena, MI
	Ludington, MI		Calcite, MI
	Manistee, MI		Cedarville, MI
	Muskegon, MI		Charlevoix, MI
	Pentwater, MI		Cheboygan, MI
	St. Joseph, MI		Drummond Island, MI
Detroit	Detroit, MI		Escanaba, MI
	Alabaster, MI		Gladstone, MI
	Harbor Beach, MI		Mackinac, MI
	Marine City, MI		Mackinaw City, MI
	Marysville, MI		Manistique, MI
	Port Huron, MI		Marquette, MI
	St. Clair, MI		Munising, MI
Duluth	Washington, MI		Port Dolomite, MI
	Duluth-Superior, MN & WI		Port Gypsum, MI
	Silver Bay, MN		Port Inland, MI
	Taconite, MN		Presque Isle, MI
	Two Harbors, MN		St. Ignace, MI
	Ontonagan, MI		St. James, MI
	Ashland, WI		Stoneport, MI
	Bayfield, WI		Traverse City, MI
	La Pointe, WI	Milwaukee	Milwaukee, WI
Buffalo	Washburn, WI		Green Bay, WI
	Buffalo, NY		Manitowoc, WI
	Alexandria Bay, NY		Northport, WI
	Dunkirk, NY		Port Washington, WI
	Ogdensburg, NY		Racine, WI
	Oswego, NY		Sheboygan, WI
	Rochester, NY		Sturgeon Bay, WI
	Sackets Harbor, NY		Menominee, MI
Cleveland	Erie, PA	Los Angeles/Long Beach	Los Angeles, CA
	Cleveland, OH		Long Beach, CA
	Ashtabula, OH		Ellwood, CA
	Conneaut, OH		Newport Bay Harbor, CA
	Fairport Harbor, OH		Port Hueneme, CA
	Lorain, OH		Redondo Beach, CA
			Santa Barbara, CA
			Santa Monica, CA
			Ventura, CA

Appendix A to Enclosure (1) to NAVIGATION AND INSPECTION CIRCULAR 07-04

COTP Zone	U.S. Port	COTP Zone	U.S. Port
San Francisco Bay	San Francisco, CA	Anchorage	Anchorage, AK
	Berkeley, CA		Barrow, AK
	Bodega Bay, CA		Beluga, AK
	Crescent City, CA		Bethel, AK
	Humboldt, CA		Brevig Mission, AK
	Monterey Harbor, CA		Dillingham, AK
	Morro Bay, CA		False Pass, AK
	Moss Landing, CA		Homer, AK
	Oakland, CA		Hooper Bay, AK
	Redwood City, CA		Humboldt, AK
	Richmond, CA		Kaktovik, AK
	Sacramento, CA		King Cove, AK
	Santa Cruz, CA		Kivilina, AK
	Stockton, CA		Kodiak, AK
San Diego	San Diego, CA		Nikishka (Nikiski), AK
	Mission Bay, CA		Ninilchik, AK
Puget Sound	Seattle, WA		Nome, AK
	Tacoma, WA		Old Harbor, AK
	Anacortes, WA		Point Hope, AK
	Bellingham, WA		Port Graham, AK
	Blaine, WA		Port Heiden, AK
	Everett, WA		Port Lions, AK
	Grays Harbor, WA		Port Moller, AK
	Neah Bay, WA		Seldovia, AK
	Olympia, WA		Seward, AK
	Port Angeles, WA		Teller, AK
	Port Gamble, WA		Tin City, AK
	Port Townsend, WA		Wainwright, AK
	Willapa, WA		Wales, AK
Portland, OR	Portland, OR	Valdez	Valdez, AK
	Astoria, OR		Cordova, AK
	Coos Bay, OR		Whittier, AK
	Pacific City, OR	Juneau	Juneau, AK
	Port Orford, OR		Craig, AK
	Kalama, WA		Haines, AK
	Longview, WA		Hoonah, AK
	Vancouver, WA		Hydaburgm (Hydaburg), AK
Honolulu	Honolulu, HI		Kake, AK
	Barbers Point, Oahu, HI		Ketchikan, AK
	Hilo, HI		Klawock, AK
	Kahului, Maui, HI		Metlakatla, AK
	Kaunalapau, Lanai, HI		Pelican, AK
	Kaunakakai, Molokai, HI		Petersburg, AK
	Kawaihae Harbor, HI		Sitka, AK
	Lahaina, Maui, HI		Skagway, AK
	Nawiliwili, Kauai, HI		Wrangell, AK
	Pearl Harbor, Oahu, HI		Yakutat, AK

Enclosure (2) to NAVIGATION AND INSPECTION CIRCULAR 07-04

**BALLAST WATER MANAGEMENT (BWM) REPORTING AND
RECORDKEEPING VERIFICATION AND COMPLIANCE**

Enclosure (2) to NAVIGATION AND INSPECTION CIRCULAR 07-04

Enclosure 2 - BWM REPORTING AND RECORDKEEPING VERIFICATION AND COMPLIANCE

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Introduction.

This enclosure provides guidance to Coast Guard COTPs and OCMI's to effectively monitor compliance with the BWM reporting and recordkeeping requirements.

A. Coast Guard Implementation.

Coast Guard Marine Inspectors (MIs) and Boarding Officers (BOs) shall examine the onboard BWM records, make appropriate inquiries to assess adherence with the BWM recordkeeping requirements, and pursue appropriate enforcement actions when necessary.

Coast Guard Headquarters may provide field units with BWM lookout lists that identify vessels with a history of either not reporting or submitting inaccurate or incomplete BWM reports to the NBIC. These vessels should undergo an expanded examination of their BWM records during regularly scheduled inspections and boardings. Appropriate enforcement action should be taken against all vessels listed on the BWM lookout lists unless reasonable evidence is provided by the master which disputes the reasons for the vessel being listed, or unless an enforcement activity has already been initiated in Marine Information for Safety and Law Enforcement (MISLE) database by another port for the same lookout listing.

1. Pre-examination Preparation.

Prior to conducting a BWM examination, Coast Guard MIs and BOs shall be familiar with:

- 33 CFR 151, subparts C and D;
- These procedures;
- Any current BWM lookout lists issued by Coast Guard Headquarters; and
- The vessel's history as shown in the MISLE database.

2. Education and Accountability Tracking.

As education of the maritime community is a central element of the Coast Guard's BWM Program, marine safety personnel should ensure that interested parties are aware of this NVIC and the guidance provided within it.

Marine safety personnel should also emphasize that:

- a. The Coast Guard is collecting BWM data to determine ballasting practices and delivery patterns that may transfer ANS into and throughout the waters of the United States;
- b. All vessels equipped with ballast water tanks (including wing tanks and dual purpose fuel tanks) are required to report even if they are declaring NOBOB or have no intentions of discharging ballast in U.S. waters; unless specifically exempted under 33 CFR 151.2010;
- c. BWM reports are now required each time a vessel enters a COTP zone to anchor or moor, regardless of whether the vessel operated beyond the U.S. EEZ;

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- d. Failure to submit accurate and complete BWM reports, and maintain the required BWM records, may result in civil or criminal penalties;
- e. Electronic means (Web and e-mail submissions via the NBIC website) are the preferred method, and are strongly encouraged, for submitting the *Ballast Water Reporting Forms* to the NBIC;
- f. Complete and accurate BWM records must be kept on board for two years and must include entries for every voyage to a U.S. port or place where the vessel enters a COTP zone to anchor or moor; and
- g. Printing out, signing, and retaining onboard copies of properly submitted *Ballast Water Reporting Forms*, along with the proof of receipts or e-mail replies from NBIC, is the best way to ensure compliance with both the reporting and recordkeeping requirements.

When the above outreach guidance is delivered during a ballast water examination, an entry shall be made in the *Special Notes* block of the MISLE database, *Ballast Water Inspection Activity* section, that states:

“Ballast water reporting and recordkeeping guidance provided to vessel on [DATE].”

This entry will document the vessel’s notification of the requirements, help prevent redundant outreach efforts, and provide a baseline for any future enforcement actions. [NOTE: The retention date for this *Special Note* in MISLE should be set for 2 years]

3. Examination of BWM Records.

MIIs and BOs shall examine the shipboard BWM records and determine if it appears that the vessel complies with the reporting and recordkeeping requirements. The following steps, and the suggested job aid in Appendix A to Encl. (2), will help MIIs and BOs determine compliance with the BWM reporting and recordkeeping requirements [NOTE: MIIs and BOs are encouraged to add the job aid in Appendix A to existing CG-840 booklets until formally incorporated into the appropriate manuals]:

- a. Check that signed copies of the ship’s ballast water records, going back two years (or for vessels that have not operated outside the U.S. EEZ, the lesser of either two years or the August 13, 2004 implementation date) are readily available for inspection and properly filled out in accordance with 33 CFR 151.2045. Records consisting of properly completed *Ballast Water Reporting Forms* (OMB form Control No. 1625-0069) meet the requirements. Ballast water logs or record books that contain all the required information are also acceptable whether they are separate documents or integrated with other record systems.
- b. Verify that records are completed for each voyage to a U.S. port or place of destination that takes the ship beyond the limits of any COTP zone. This can be done by simply spot-checking the ports of arrival in the vessel’s deck log with the signed BWM records. For every U.S. port of arrival in a different COTP zone, and every arrival where the vessel transited outside and then back into the same COTP zone, there should be a signed BWM record on board.

Enclosure (2) to NAVIGATION AND INSPECTION CIRCULAR 07-04

- c. Review the BWM records to ensure all the required information is captured. If the vessel has ballast that they do not intend on discharging or are declaring NOBOB, then only the "Information on ballast water tanks that are to be discharged" (as listed in 33 CFR 151.2045(a)(5) or Section 5 of the *Ballast Water Reporting Form*) should be absent from the ballast water records, all other required BWM information should still be recorded.
- d. Check to see if the BWM records indicate whether the vessel has or intends to discharge ballast in U.S. waters.
- e. Ask the master, chief mate or chief engineer what ports the vessel has visited and what type of cargo, fueling and ballasting operations have been conducted. Also ask what the vessel's draft has been in relation to the depth of the U.S. ports or channels the vessel has transited. When the depth of a port or channel limits draft, or when cargo or fuel is taken on without a comparable consumption of fuel or offload of cargo, ballast discharge is often conducted. For all ballast discharges in U.S. waters, accompanying discharge entries must be included in the onboard BWM records.
- f. Note any inconsistencies or gaps between the BWM documentation, the deck log, and the vessel's draft or cargo operations.
- g. If the vessel is suspected of being out of compliance (with any applicable BWM requirements or other inspection items), conduct an expanded BWM record check.

4. Expanded Examination of BWM Records.

If the vessel is listed on a current BWM lookout list issued by Coast Guard Headquarters, has outstanding BWM requirements or deficiencies noted in MISLE, or is suspected of non-compliance after a cursory check of the BWM records, an expanded examination of the vessel's BWM records should follow.

- a. An expanded record check includes having the master provide proof from the vessel's BWM plan, deck log entries, charts, or other sources (see "Expanded BWM Record Check" in Appendix A-2 to Enclosure (2)) that ballasting operations are consistent with the on board BWM records. If applicable, ask to see the vessel's Oil Record Book Part II (ORB) and/or Cargo Record Book (CRB). These books are required under MARPOL Annex I and II (ORB for tankers over 150 tons and CRB for all ships carrying Noxious Liquid Substances in bulk) and might provide additional BWM information such as the position and time at the start and end of any ballasting operation.
- b. An expanded records check may also include interviewing the master, chief mate and chief engineer separately about the vessel's ballasting operations, and requiring each to demonstrate how the planned ballast operations are consistent with cargo, stability, transit and fueling operations.
- c. If an expanded BWM record check indicates that BWM records may have been deliberately altered or falsified, the MI or BO should immediately request assistance from a qualified Coast Guard Investigating Officer (IO) to investigate more thoroughly.

- d. If the vessel is listed in a current BWM lookout list because they have submitted incomplete or incorrect reports, or if the BWM records appear to be out of compliance, follow the tiered approach to enforcement as indicated in Enclosure (3) of this NVIC. Note each discrepancy in a CG-835 (for U.S. vessels) or CG-5437 (for foreign vessels) form and require the vessel to fix all discrepancies, update their records, and/or submit amended BWM reports to the NBIC as applicable.
- e. If the vessel is listed in a current BWM lookout list because *Ballast Water Reporting Forms* have not been submitted, appropriate enforcement actions should be taken following the guidance in Enclosure (3) of this NVIC, unless the master or operator can provide reasonable evidence that exonerates them. Such evidence could include dated proofs of receipt or NBIC e-mail replies that indicated the required *Ballast Water Reporting Forms* were successfully transmitted to the NBIC. Fax transmittal records may indicate that the vessel attempted to submit a report to NBIC and should also be taken into consideration when making a determination of the vessel's overall compliance.
- f. Upon completion of the inspection, the Coast Guard inspection personnel will inform the master as to whether or not the vessel meets the mandatory BWM reporting and record keeping requirements. Any discrepancies shall be provided to the master and the appropriate enforcement actions should be initiated as per Enclosure (3) of this NVIC.

5. Evaluation of Compliance.

A vessel is not in compliance with the mandatory BWM reporting and recordkeeping requirements if any of the following occurs:

- a. The master, owner, operator, shipping agent or persons-in-charge fails to provide the BWM report to the proper location (the NBIC; COTP New York; COTP Buffalo, Massena Detachment; or the Saint Lawrence Seaway Development Corporation, as applicable) within the required timeframe;
- b. The master, owner, operator, or person-in-charge fails to retain the necessary signed BWM records onboard the vessel for two years (or for vessels that have not operated outside the U.S. EEZ, the lesser of either two years or the August 13, 2004 implementation date); or
- c. The required records and/or reports are not complete and accurate.

Failure to provide or maintain the above documentation is a violation of the regulations, and may be subject to penalties.

6. MISLE Documentation.

Coast Guard marine safety personnel shall ensure that the appropriate documentation of BWM activities is entered into the MISLE computer system. This includes ballast water outreach efforts, deficiencies noted, expanded examinations conducted, enforcement efforts, involved parties, and any activity related to BWM. A step-by-step guide for proper ballast water entries into the MISLE system can be found on the Coast Guard Intranet at http://mislenet.osc.uscg.mil/user_guides.aspx.

Examination of BWM Records: (33 CFR 151.2045)

☐ BWM RECORDS READILY AVAILABLE AND RETAINED ONBOARD FOR 2 YEARS (OR FOR VESSELS THAT HAVE NOT OPERATED OUTSIDE THE EEZ, THE LESSER OF EITHER 2 YEARS OR SINCE AUGUST 13, 2004).

☐ SIGNED RECORDS COMPLETE FOR EVERY VOYAGE TO A U.S. PORT OR PLACE:

☐ VESSEL INFORMATION

- Vessel Name & IMO Number
- Owner
- Type
- Gross Tonnage
- Call Sign
- Flag

☐ VOYAGE INFORMATION

- Arrival Port & Arrival Date
- Last Port
- Country of Last Port
- Next Port
- Country of Next Port

☐ TOTAL BALLAST WATER INFORMATION

- Total Ballast Water on Board
 - Volume
 - Units
- Number of Tanks in Ballast
- Total Ballast Water Capacity
 - Volume
 - Units
- Total Number of Tanks on the Ship

☐ BALLAST WATER MANAGEMENT

- Total number of tanks/holds to be discharged
- Total number of tanks that underwent management
- Management Methods Specified (exchange, retention)

☐ INFORMATION ON TANKS TO BE DISCHARGED

- Tanks/Holds Discharged or to be Discharged in U.S.
- Origin of Ballast Water Discharged or to be Discharged (date, location, vol., temp.)
- BWM: date, location, volume, method, thoroughness (percent exchange), and sea height at time of BWM.
- Ballast Water Discharges (date, location, vol., salinity)

☐ FACILITY LOCATION OF SEDIMENT DISCHARGES

☐ RESPONSIBLE OFFICERS SIGNATURE

☐ DO RECORDS APPEAR CONSISTENT WITH PLANNED CARGO, FUEL, STABILITY AND DRAFT OPERATIONS AS DESCRIBED BY THE MASTER, CHIEF MATE OR CHIEF ENGINEER? Y / N

NOTE: Ballast discharge in U.S. waters may be likely when:

- A) A vessel is taking on more cargo or fuel in U.S. waters than is being offloaded or consumed; or
- B) A vessel has to decrease draft in order to transit through any U.S. waterway.

For all ballast discharges in U.S. waters, equivalent discharge entries must be included in the onboard BWM records.

If noncompliance is suspected, or the vessel is on a BWM lookout list, conduct an Expanded Examination of BWM Records

Expanded Examination of BWM Records:

An expanded records check should be conducted whenever a vessel is suspected of being noncompliant with the mandatory BWM reporting or recordkeeping requirements or is listed on a BWM lookout list.

BWM REPORTS:

For a vessel suspected of being noncompliant with the reporting requirements, determine if any evidence provided by the master, owner, operator or person-in charge, reasonably disputes the reasons for the suspected noncompliance and exonerates the vessel from penalties. Such reasonable evidence may include copies of the properly completed *Ballast Water Reporting Forms* with: return receipts, e-mail replies, fax transmittals, or return receipt cards.

- If reasonable evidence cannot be provided, enforcement actions may follow.
- If reasonable evidence is provided, ensure the evidence covers all arrivals where reports were required.

BWM RECORDS

For a vessel suspected of being noncompliant with the recordkeeping requirements, determine if operations are consistent with the BWM records. If there is reasonable evidence that the vessel has or will be discharging ballast in U.S. waters, the BWM records should have corresponding discharge entries.

The following can assist in this determination:

- Interview the master, chief mate, chief engineer and/or other crewmembers and require each to demonstrate how the vessel's ballast operations are consistent with cargo, transit, and fueling operations.
- From the supporting vessel documentation and interviews, determine if cargo will be loaded or fuel will be bunkered in U.S. waters, and whether this requires deballasting.

- From the supporting vessel documentation and interviews, determine if the vessel will be restricted in draft during any transit in U.S. waters and whether this requires deballasting.

- From the supporting vessel documentation and interviews, determine if the planned ballasting operations are consistent with the vessel's stability requirements.

If the vessel is found to be noncompliant, notify the master about each deficiency, initiate enforcement action, and gather copies of supporting evidence.

If at anytime, deliberate deception, or willful violation of the BWM recordkeeping requirements is suspected, request assistance from a qualified Coast Guard Investigating Officer.

ONBOARD EVIDENCE SOURCES

The following sources may provide supporting evidence when checking the accuracy of ballast water management records:

- Ballast Water Management Plan
- Oil Record Books
- Cargo Record Books
- Cargo plans/logs of the start and stop of cargo operations
- Engineer Logs
- Ballast work-boards or logs in the Engine Room or Ballast Control Room
- Stability and Trim Booklets
- Tank Sounding Sheets or Sounding Logs
- Third party reports (Surveyor/Gauging Records)
- Deck Logs for port visits and sea conditions
- Navigational Charts for transit and control depths
- Coast Pilots for control depths

Enclosure (3) to NAVIGATION AND INSPECTION CIRCULAR 07-04

**BALLAST WATER MANAGEMENT (BWM)
ENFORCEMENT GUIDANCE**

Enclosure (3) to NAVIGATION AND INSPECTION CIRCULAR 07-04

Enclosure 3 - BWM ENFORCEMENT GUIDANCE

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Introduction.

Violations of the mandatory BWM requirements may be enforced through both civil and criminal penalties. COTPs and OCMI's should consider the full range of enforcement options and ensure the most effective and appropriate means are employed. To gain compliance with the BWM Program, COTPs and OCMI's should take into account the vessel's overall compliance (with the BWM and other vessel requirements) and should follow a tiered approach towards enforcement that includes verbal education, Letters of Warning (LOW), Notices of Violation (NOV), civil penalties, Suspension and Revocation (S&R), Captain of the Port Orders and criminal charges in the most egregious situations. Units may also consider including superior compliance recognition programs for those operators who continuously show superior compliance with new or existing BWM requirements. For all BWM enforcement actions taken, the appropriate involved parties should be linked to the enforcement activity in MISLE.

A. BWM Enforcement Options.

1. Verbal Education.

The goal is to ensure that all vessels are notified of their BWM obligations through outreach efforts prior to initiating remedial actions. During initial inspections, minor first time discrepancies should be noted in the *Narrative* section of the MISLE *Inspection Activity* and verbally explained to the master for immediate corrective action. All vessels provided with BWM outreach guidance and material shall have an entry made in the *Special Notes* block of the MISLE database, *Ballast Water Inspection Activity* section – these vessels should be considered as being previously notified of the BWM requirements if future enforcement action is initiated.

2. Letter of Warning (LOW).

LOWs are appropriate for minor violations that are corrected immediately by conscientious operators. Generally, for minor administrative deficiencies (a missing BWM record entry or incomplete information in BWM record) the preferred enforcement action may be to issue a warning, as appropriate (see Appendix A to Encl. (3)). The operator should also be issued a requirement to correct the deficiency prior to the next U.S. port visit or BWM operation in U.S. waters. These vessels will be allowed to complete any ongoing BWM operation, however, a deficiency should be noted in MISLE.

If the Coast Guard COTP or OCMI determines that there is evidence of a violation of the mandatory BWM requirements, and a vessel history search does not indicate prior violations for the same statute, a LOW may be issued to the master, owner, operator, agent or person-in charge of the vessel. Documentation of this action must be completed in the MISLE *Enforcement Activity* in accordance with the *MISLE Investigation Enforcement Process Guide*.¹

¹ MISLE Investigation Enforcement Process Guide, Version 05-2002, Internet, available at: http://mislenet.osc.uscg.mil/user_guides.aspx

To facilitate LOW issuance, COTPs and OCMI's are recommended to develop template LOWs, based on the format shown in Appendix A to Encl (3), for MI's and BOs to carry during BWM examinations.

3. Notice of Violation (NOV).

NOVs are issued as an alternative to the civil penalty process. They are often the quickest and most effective way to compel compliance since they can be issued in the field to the responsible person. The evidence for a NOV, however, is no less than that of a civil penalty, and the issuer must be prepared to proceed with a civil penalty case if the responsible person declines the NOV.

Upon updating the *Notice of Violation User's Guide* (COMDT INST M5582.1A) to include violations of the applicable BWM regulations, an NOV may be issued to the master, owner, operator, agent or person-in charge of a vessel if it is listed on a BWM lookout list issued from Coast Guard Headquarters for failing to submit complete and accurate BWM reports, or if the COTP or OCMI determines that there is evidence of a violation of any applicable BWM requirements.

Documentation of such action must be completed in the MISLE enforcement activity in accordance with the *MISLE Investigation Enforcement Process Guide*.

4. Administrative Civil Penalty.

Civil penalties are normally initiated for major non-criminal violations, for repeat offenders, and any minor violations that are not corrected immediately by the responsible party. Persons who violate the mandatory BWM requirements are subject to civil penalties not to exceed \$27,500, with each day of a continuing violation considered a separate violation, and vessels operated in violation of these regulations are liable *in rem* for any civil penalty assessed.

While a civil penalty action will not normally be initiated for first time reporting and record keeping requirement violations, if a vessel makes a return visit, arriving or departing with similar deficiencies, the case should be referred to a qualified Coast Guard Investigating Officer and the COTP or OCMI should consider initiating civil penalty proceedings.

If the cognizant COTP or OCMI determines that there is evidence of a violation of these requirements, an Administrative Civil Penalty may be the appropriate enforcement action. Documentation of this action must be completed in the MISLE enforcement activity (in accordance with the *MISLE Investigation Enforcement Process Guide*) and forwarded to the Coast Guard Hearing Officer for action.

5. Captain of the Port Orders.

Under 33 USC 1223 (b), a Captain of the Port Order may serve as an appropriate mechanism to achieve compliance with the applicable BWM regulations.

6. Suspension and Revocation (S&R).

After all evidence has been collected and all witnesses have been interviewed, the OCMI, Coast Guard District Office or Coast Guard Headquarters may decide to initiate S&R proceedings against a credentialed mariner under 46 CFR Part 5. S&R complaints issued under 46 CFR 5.33 for violations of the BWM requirements must contain the specific regulation or statutory title and section number; and documentation of the S&R action must be completed in accordance with the *MISLE Investigation Enforcement Process Guide*.

7. Revocation of Clearance and Customs Holds.

When a vessel owner or operator is in violation of the Great Lakes or Hudson River BWM requirements of 33 CFR 151, subpart C, the COTP may request revocation of clearance under the provisions of 33 CFR 151.1508. Since, however, the National Invasive Species Act does not explicitly include provisions for Letters of Undertaking (LOUs) or Surety Bonds, as do other familiar marine safety and pollution statutes, COTPs are advised to contact their respective District legal office before granting clearance to any vessel that had its clearance revoked or withheld under this statute.

8. Criminal Proceedings.

Individuals who knowingly and willfully violate the mandatory BWM requirements may be guilty of a Class C Felony and be subject to criminal proceedings. Cases falling into this category should be rare and typically be reserved for chronic, willful violators. In all cases, units shall consult their District legal offices and refer to COMDTINST M16201.1 (Criminal Enforcement of Environmental Laws) and Chapter 9 of COMDTINST M16247.16 (Maritime Law Enforcement Manual) for case processing and procedures regarding the disposition and arrest of persons.

Completion Instructions For Ballast Water Reporting Form

(Please write in English and PRINT legibly.)

Is this an Amended Ballast Reporting Form? Check Yes or No. Amendments should be submitted if there are any differences between actual ballast discharges and discharge information reported in a prior form. Please mark "Yes" if this form amends a previously submitted ballast reporting form.

SECTION 1. VESSEL INFORMATION

Vessel Name: Print the name of the vessel clearly.

IMO Number: Fill in identification number of the vessel used by the International Maritime Organization.

Owner: Write in the name of the registered owner(s) of the vessel. If under charter, enter Operator name.

Type: List specific vessel type. Use the following abbreviations: bulk (bc), roro (rr), container (cs), tanker (ts), passenger (pa), oil/bulk ore (ob), general cargo (gc), reefer (rf). Write out any additional vessel types.

GT: What is the Gross Tonnage of the vessel?

Call Sign: Write in the official call sign.

Flag: Fill in the full name of the country under whose authority the ship is operating. *No abbreviations please.*

SECTION 2. VOYAGE INFORMATION

Arrival Port: Write in the name of your United States port or place of destination for this voyage. *No abbreviations please.*

Arrival Date: Fill in the arrival date to the above port. Please use European date format (DDMMYY).

Agent: List agent used for the Arrival Port.

Last Port: Fill in the last port at which the vessel called. *No abbreviations please.*

Country of Last Port: Fill in the last country at which the vessel called. *No abbreviations please.*

Next Port: Fill in the port at which the vessel will call immediately after departing the Arrival Port. *No abbreviations please.*

Country of Next Port: Fill in the country of "Next Port" at which the vessel will call immediately after departing the Arrival Port. *No abbreviations please.*

SECTION 3. BALLAST WATER

Total Ballast Water on Board:

Volume: What was the total volume of ballast water on board upon arrival into the "Arrival Port" listed in Section 2? Do not count potable water.

Units: *Please include volume units* (m3, MT, LT, ST).

Number of Tanks in Ballast: Count the number of ballast tanks and holds with ballast as vessel arrives into the "Arrival Port" listed in Section 2.

Total Ballast Water Capacity:

Volume: What is the maximum volume of ballast water used when no cargo is on board?

Units: *Please include volume units* (m3, MT, LT, ST).

Total Number of Tanks on Ship: Count all tanks and holds that can carry ballast water (do not include tanks that carry potable water).

SECTION 4. BALLAST WATER MANAGEMENT

Total No. of tanks to be discharged: Count only tanks and holds with ballast to be discharged into waters in the port state of arrival or into an approved reception facility. Count all tanks and holds separately (e.g., port and starboard tanks should be counted separately).

Of tanks to be discharged, how many Underwent Exchange: Count all tanks that are to be discharged in the port state of arrival or into an approved reception facility.

Of tanks to be discharged, how many Underwent Alternative Management: Count all tanks that are to be discharged in the port state of arrival or an approved reception facility.

Please specify alternative method(s) used, if any: Specifically, describe methods other than Empty/Refill or Flow-Through used for ballast management.

If no ballast treatment conducted, state reason why not: This applies to *all unexchanged tanks and holds* being discharged in the port state of arrival or into an approved reception facility.

Ballast Management Plan on board?: Is there a written document on board, specific to your vessel, describing the procedure for ballast management? This should include safety and exchange procedures (usually provided by vessel's owner or operator). Check Yes or No.

Management Plan implemented?: Do you follow the above management plan? Check Yes or No.

IMO Ballast Water Guidelines on board?: Is there a copy of the International Maritime Organization (IMO) Ballast Water Guidelines on board this vessel (i.e. "Guidelines for the Control and Management of Ship's Ballast Water to Minimize the Transfer Aquatic Organisms and Pathogens", [Res. A.868(20)])? Check Yes or No.

SECTION 5. BALLAST WATER HISTORY

(Record all tanks to be deballasted in port state of arrival: If none, go to #6)

Tanks/Holds: Please list *all tanks and holds* that you have discharged or plan to discharge into waters of the United States or into an approved reception facility (write out, or use codes listed below table). Follow each tank across the page listing all source(s), all management events, and all discharge events separately.

List each tank on a separate line. Paired port and starboard tanks with identical ballast water histories may be included on same line. Please use an additional page if necessary, being careful to include ship name, date, and IMO number at the top of each.

For tanks with multiple sources: list 3 largest sources from last 30 days on separate lines. If more than 3 sources, include a 4th line for the respective tank(s) that indicates "Multiple" in port column and list the remaining tank volume not included in the 3 largest sources (i.e. total tank volume minus volume of the 3 largest sources).

-BW SOURCES-

Date: Record date of ballast water uptake. Use European format (DDMMYY).

Port or latitude/longitude: Record location of ballast water uptake. *No abbreviations for ports.*

Volume: Record total volume of ballast water uptake, *with volume units.*

Temp: Record water temperature at time of ballast water uptake, in degrees Celsius (include units).

-BW MANAGEMENT PRACTICES-

Date: Date of ballast water management practice. If exchanges occurred over multiple days, list the day when exchanges were completed. Use European format (DDMMYY).

Endpoint or latitude/longitude: Report location of ballast water management practice. If an exchange occurred over an extended distance, list the end point latitude and longitude.

Volume: Report total volume of ballast water moved (i.e., gravitated and pumped into tanks, discharged to reception facility) during management practice, *with units.*

% Exchange: (Note: for effective flow through exchange, this value should be at least 300%).

$$\% \text{ Exchange} = \frac{\text{Total Volume Added by Empty/Refill or by Flow Through}}{\text{Capacity of Ballast Tank or Hold}} \times 100$$

Method: Indicate management method using code (ER = empty/refill, FT = flow through, ALT = alternative method).

Sea Ht. (m): Estimate the sea height in meters at the time of the ballast water exchange if this method was used. (Note: this is the combined height of the wind-seas and swell, and does not refer to water depth).

-BW DISCHARGES-

Date: Date of ballast water discharge. Use European format (DDMMYY).

Port or latitude/longitude: Report location of ballast water discharge. *No abbreviations for ports.*

Volume: Report volume of ballast water discharged, *with units.*

Salinity: Document salinity of ballast water at the time of discharge, *with units* (i.e., specific gravity (sg) or parts per thousand (ppt)).

SECTION 6. TITLE AND SIGNATURE

Responsible officer's name and title (printed) and signature: Print name and title, include signature. A signature is not necessary on electronic forms.

BALLAST WATER REPORTING FORMIS THIS AN AMENDED BALLAST REPORTING FORM? YES ☐ NO ☐

1. VESSEL INFORMATION		2. VOYAGE INFORMATION		3. BALLAST WATER USAGE AND CAPACITY	
Vessel Name:		Arrival Port:		Specify Units Below (m³, MT, LT, ST, gal)	
IMO Number:		Arrival Date (DD/MM/YYYY):		Total Ballast Water on Board:	
Owner:		Agent:		Volume	No. of Tanks in Ballast
Type:		Last Port:			m3
GT:		Country of Last Port:		Total Ballast Water Capacity:	
Call Sign:		Next Port:		Volume	Total No. of Tanks on Ship
Flag:		Country of Next Port:			m3

4. BALLAST WATER MANAGEMENTTotal No. Ballast Water Tanks to be discharged: ☐Of tanks to be discharged, how many: Underwent Exchange: ☐Underwent Alternative Management: ☐

Please specify alternative method(s) used, if any: _____

If no ballast treatment conducted, state reason why not: _____

Ballast management plan on board? YES ☐ NO ☐ Management plan implemented? YES ☐ NO ☐IMO ballast water guidelines on board [res. A.868(20)]? YES ☐ NO ☐**5. BALLAST WATER HISTORY: Record all tanks to be deballasted in port state of arrival (enter additional tanks on page 2). IF NONE, GO TO #6**

Tanks/ Holds List multiple sources/tanks separately	BW SOURCE			BW MANAGEMENT PRACTICES					BW DISCHARGE					
	DATE DD/MM/YYYY	PORT or LAT. LONG.	VOLUME (units)	TEMP (units)	DATE DD/MM/YYYY	ENDPOINT LAT. LONG.	VOLUME (units)	% Exch	METHOD (ER/FT/ ALT)	SEA HT. (m)	DATE DD/MM/YYYY	PORT or LAT. LONG.	VOLUME (units)	SALINITY (units)
			m3	C					ER				m3	sg
			m3	C					ER				m3	sg
			m3	C					ER				m3	sg
			m3	C					ER				m3	sg
			m3	C					ER				m3	sg

Ballast Water Tank Codes: Forepeak = FP, Aftpeak = AP, Double Bottom = DB, Wing = WT, Topside = TS, Cargo Hold = CH, Other = O

6. RESPONSIBLE OFFICER'S NAME AND TITLE: _____

All dates are listed in DD/MM/YYYY format. This date is interpreted as 03 May 2004.

Marked as "No" indicating that information for this voyage has never been submitted before. The box would be marked "Yes" only if the Form contained amendments (updates) to previously submitted information.

BALLAST WATER REPORTING FORM

1. VESSEL INFORMATION

Vessel Name: NBIC RELIANT

IMO Number: 0000000

Owner: Lion Shipping, LLC

Type: Bulk Carrier

GT: 40124

Call Sign: 123ABC

Flag: USA

2. VOYAGE INFORMATION

Is this an amended Ballast Reporting Form? YES ☐ NO ☒

Specify Unit Below (m³, MT, LT, ST)

3. BALLAST WATER USAGE AND CAPACITY

Arrival Date: 03/05/2004

Agent: Gray Ship Management

Country of Last Port: Germany

Country of Next Port: USA

Volume: 20229 m³

Total Ballast Water on Board: 6

Volume: 30000 m³

Total Ballast Water Capacity: 17

4. BALLAST WATER MANAGEMENT

Total No. Ballast Water Tanks to be discharged: 6

Undervent Alternative Management: 0

Of tanks to be discharged, how many: Undervent Exchange: 5

Please specify alternative method(s) used, if any: Operational time constraints

Ballast management plan on board? YES ☒ NO ☐ Management plan implemented? YES ☒ NO ☐ If no ballast treatment concluded, state reason why not: IWO ballast water guidelines on board (res. A.981(20))

Two paired tanks treated identically (same Source Date, Location, same Management Information) can be listed on one line.

This volume is the sum of the two paired tanks' volumes.

Please specify alternative methods used, if any: _____

Operational time constraints YES ☒ NO ☐ Management plan implemented? YES ☒ NO ☐

Ballast management plan on board? YES ☒ NO ☐ MCO ballast water guidelines on board (Res. A.863/2017)? YES ☒ NO ☐

5. BALLAST WATER HISTORY: Record all tanks to be deballasted in port state of arrival: IF NONE, GO TO #6 (Use additional sheets as needed)

Tanks/ Holdings/ Intermediate Storage/ Sewage Treatment	BW SOURCE				BW MANAGEMENT PRACTICES				BW DISCHARGE					
	DATE MM/YY/YY	PORT OR LAT. LONG.	VOLUME (m ³)	TEMP (°C)	DATE MM/YY/YY	PORT OR LAT. LONG.	VOLUME (m ³)	TEMP (°C)	DATE MM/YY/YY	PORT OR LAT. LONG.	VOLUME (m ³)	TEMP (°C)		
DB P&S	21/04/04	54°48N 008°29E	4432 m ³	10	29/04/04	47°23N 032°16W	4500 m ³	100	ER	1.0	03/05/04	Baltimore	4432 m ³	1.025
DB	20/04/04	Bremerhaven Germany	2467 m ³	10	29/04/04	47°21N 032°18W	2467 m ³	98	ER	1.5	03/05/04	Baltimore	2467 m ³	1.025
DB	20/04/04	Bremerhaven Germany	2500 m ³	10	29/04/04	47°21N 032°22W	2500 m ³	100	ER	1.5	03/05/04	Baltimore	2510 m ³	1.025
AP	15/02/04	Klaipeda Lithuania	647 m ³	5	29/04/04	47°18N 032°25W	1975 m ³	304	FT	1.0	03/05/04	Baltimore	647 m ³	1.0007
CH	20/04/04	Bremerhaven Germany	10173 m ³	10							03/05/04	Baltimore	10173 m ³	1.025
				C										
				C										

Ballast Water Tank Codes: Forepeak = FP, Aftpeak = AP, Double Bottom = DB, Wing = WT, Topside = TS, Cargo Hold = CH, Other = O

These values should be less-than or equal to the Total No. Ballast Water Tanks to be discharged. These values represent the number of discharged tanks that were exchanged or managed.

All tanks listed must include Discharge Information and Source Information. They must also include any applicable Management Information.

Percent Exchange values are calculated using the following equation:

$$\% \text{ Exch} = \frac{\text{Total Volume Added by Refill or Flow Through}}{\text{Capacity of Tank or Hold}} \times 100$$

STATE REQUIREMENT

State: **WASHINGTON STATE**

National Monitoring Authority: US Coast Guard (USCG)

Methods acceptable: Refer to “ **Interim Ballast Water Management Report** “

BWM Reporting : Master or Agent must send BWM report as USCG form 24hours prior to entry

A Ballast Water Reporting Form, pursuant to Title 33 C.F.R. Part 151.2045, must be completed and filled with the department's designated as follows:

- Vessels bound for Puget Sound or coastal ports should file with the Marine Exchange, located in Seattle.

Marine Exchange of Puget

2701 1st Ave. Suite 110 Seattle, WA 98121-1123

Phone : 206.443.3830 Fax: 206.443.3839 Email: waballast@aol.com

- Vessels bound for the Columbia River, designated for Washington ports should file with Merchants Exchange, located in Portland

Merchants Exchange of Portland

200 S.W. Market St., Suite 190 Portland OR. 190

Phone : 503.228.4361 Fax: 503.295.3660 Email: marine.room@pdxmex

Records required: Vessel must keep BWM & report on board for a minimum of TWO years

Attachments:

- **Washington Ballast Water Management Program**
- **Interim Ballast Water Management Report**

Interim Ballast Water Management Report

Vessels owner/operators are required to file a one-time Interim Ballast Water Management report describing how they will comply with the new law according to amend Washington State Ballast Water Management Law which will be effected from July 1, 2007.

1. Interim Ballast Water Management Report

- Due date : By July 1, 2006 or before entering the Washington state ports after July 1, 2006
- Application : Commercial vessels over 300 gross tons that will enter the Washington state ports from July 1, 2006 to July 1, 2007
- Submit at : The Washington Department of Fish and Wildlife
(E-mail: ballastwater@dfw.wa.gov / Fax: 1-36-902-2845)
- Marine engineering Team reported all applied vessels to WDFW on April 03, 2006.

2. Penalty for non-compliance

- All applied vessels that enter the Washington state waters between July 1, 2006 and July 1, 2007 without having submitted the Interim Ballast Water Management Report are subject to a USD 500 fine
- Each vessel maintain the copy of the report on-board

3. Ballast management options in Washington state

- **Before July 1st 2007**
 - * Retain ballast on board
 - * Discharge only waters taken up in the Washington State, the Columbia River system, or the internal waters of British Columbia south of latitude 50° N including the Straits of Georgia and Juan de Fuca - (Referred to as "Local Waters")
 - * Exchange Ballast
 - * Treat Ballast
 - * Discharge ballast that has not been exchanged by declaring a safety exemption

▪ **After July 1st 2007**

- * Retain ballast on board

- * Discharge only waters taken up in the Washington State, the Columbia River system, or the internal waters of British Columbia south of latitude 50° N including the Straits of Georgia and Juan de Fuca - (Referred to as "Local Waters")

- * Exchange Ballast

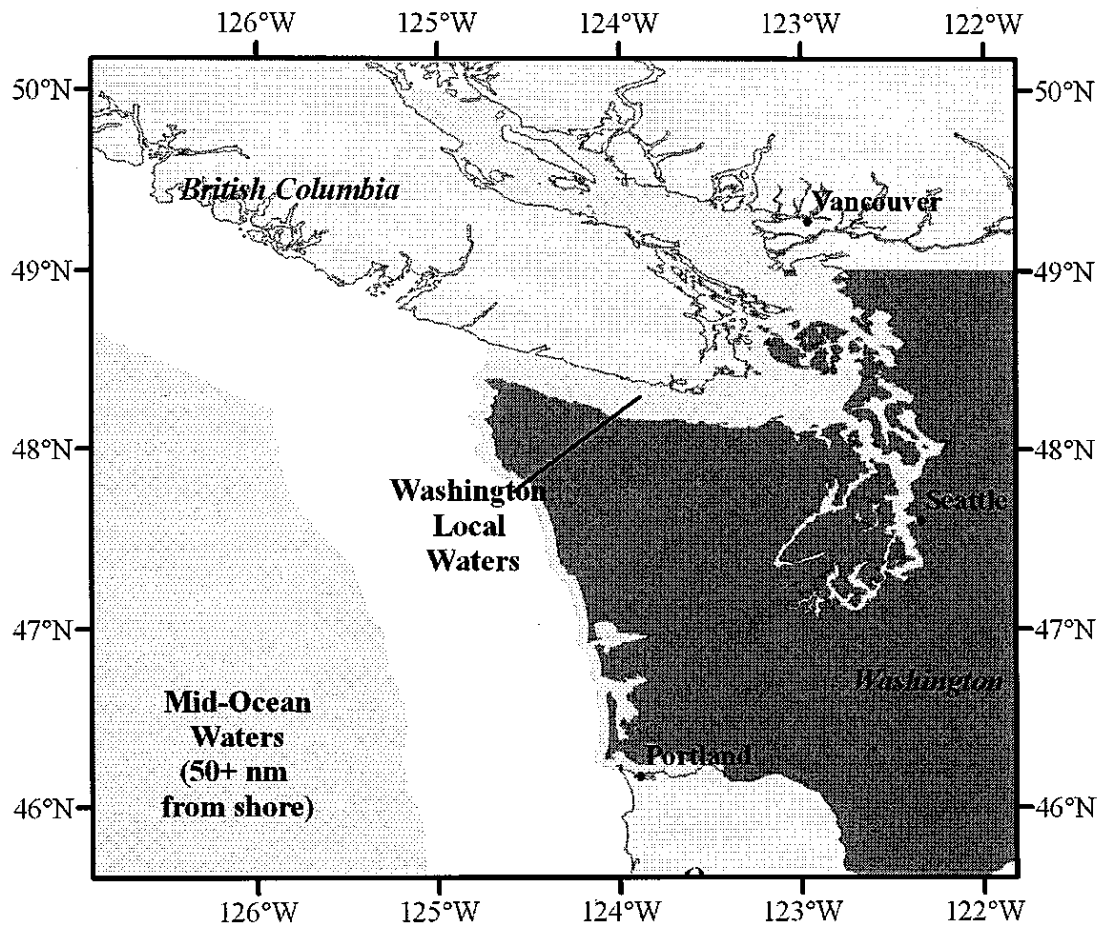
- * Treat Ballast

- * Vessels that discharge ballast that has not been exchanged or treated are subject to a \$5,000 fine

Note (NO SAFETY EXEMPTIONS): No vessel operator will be asked to exchange ballast when it is unsafe, but operators are expected to have an alternative plan, if exchange cannot be conducted safely

The Washington State Local Waters

Waters of the Washington state, the Columbia River system, and the internal waters of British Columbia south of latitude fifty degrees north, including the waters of the Straits of Georgia and Juan de Fuca.



STATE REQUIREMENT

State : **CALIFORNIA STATE**

National Monitoring Authority: CSLC

Ports affected: All

Ships affected: All vessels arriving at a California port or place carrying ballast water from another port or place within in the Pacific Coast Region

Implementation: **Mandatory**

Date of start: 2006

Methods acceptable:

Unwanted aquatic organisms or pathogens: Not defined.

Uptake control measures: None specified.

Sampling required: Not defined.

BWM Reporting : Master or Agent must send BWM report as USCG form 24hour prior to CSLC (California State Lands Commission)

Email : bwform@sls.ca.gov

Fax : +1-562-499-6444

"Submission of this form to CSLC does NOT relieve the vessel of the responsibility to report to the US Coast Guard"

**Records required: Vessel must keep BWM & report on board for a minimum of TWO years
The US has issued a format for recording the status of ballast.**

Procedure if en route management is not possible: [not yet known]

Procedure if ballast water found to be unacceptable after sampling

Not yet known; controls are still voluntary.

For further information refer to:

Attachments

- **Details of California Ballast Water Management (New)**
- **Key Components of the Law**

Details of California Ballast Water Management (New)

The California State Lands Commission(Commission) approved regulations governing ballast water management for vessels operating on the West Coast of North America. These regulations become effective March 22, 2006.

1. Applicaton

All vessels arriving at a California port or place carrying ballast water from another port or place within in the Pacific Coast Region

2. Details

Exchange the vessel's ballast water in near-coastal waters, before entering the waters of the state, if that ballast water has been taken on in a port or place or within the Pacific Coast region.

Additionally, all vessels are still required to develop and maintain a vessel-specific ballast water management plan, develop and maintain a ballast water log, submit a completed signed ballast water reporting form.

3. Application Region

- Ports or places in the California State
- Ports and Places in the San Francisco Bay area east of the Golden Gate bridge including the Ports of Stockton and Sacramento, are considered the same California port or place
- Ports of Los Angeles, Long Beach and the El Segundo marine terminal shall be considered the same California port or place

4. Ballast Water Management Method

Qualifying vessels, as described above, must be employ at least on of the following ballast water management practices:

- Exchange the vessel's ballast water in near-coastal waters, before entering the waters of the California sate
- Retain all ballast water on board the vessel)
- Use an alternative, environmentally sound method of ballast water management that, before the vessel begins the voyage, has been approved by the commission or the United States Coast Guard as being at least as effective as exchange, using mid-ocean waters, in removing or killing nonindigenous species
- Discharge the ballast water to a reception facility approved by the commission
- Under extraordinary circumstances, perform a ballast water exchange within an area agreed to by the Commission in consultation with the United States Coast Guard at or before the time of the request

5. Definition

- Coastal Waters : Estuarine and ocean waters within 200 nautical miles of land or less than 2,000 meters(6,560 feet, 1,093 fathom) deep
- Pacific Coast Region :
All coastal waters on the Pacific Coast of North America east of 154 degrees W Longitude and north of 25 degrees N latitude, exclusive of the Gulf of California
- Near Coastal Waters :
Waters that are more than 50 nautical miles from land and at least 200 meters (656 feet, 109 fathoms) deep

KEY COMPONENTS OF THE LAW

Effective January 1, 2004 - California's Marine Invasive Species Act

- **FOR VESSELS COMING FROM OUTSIDE THE EEZ** - Mandatory mid-ocean exchange OR Retention of all Ballast Water for all qualifying vessels
 - "Qualifying Vessels," means all vessels over 300 gross register tons, United States and foreign, carrying ballast water into the waters of the state after operating outside the waters of the state
 - "Exchange" means to replace water in tanks using either
 - "Flow through exchange" - overflowing the tank from the top until three volumes of water have been changed.
 - "Empty/refill exchange" - pump out, until tank is empty or nearly so, and then refilling the tank with mid-ocean waters.
 - "Mid-Ocean Waters" means waters that are more than 200 nautical miles from land and at least 2,000 meters (6,560 feet or 1,093 fathoms) deep.
- **FOR VESSELS COMING FROM OTHER WEST COAST PORTS** - Minimize ballast water discharges in state waters while rules are developed (due July 1, 2005).
- **FOR ALL VESSELS**
Mandatory Completion and Submission of Ballast Water Report Form by vessel master, owner, operator, agent, or person in charge of vessel at each port of call in California.

Ballast Water Report Form (developed by US Coast Guard)
(PDF Format) (Word 97 Format)

Form may be submitted electronically or in written form to CSLC.

FAX: 562-499-6444

Email: bwform@slc.ca.gov

**** Submission of this form to CSLC does NOT relieve the vessel of the responsibility to report to the US Coast Guard.**

Mandatory Compliance with "Good Housekeeping" Practices

Avoid uptake or discharge in or near marine sanctuaries, reserves, parks, or coral reefs

Minimize or avoid uptake in the following areas or circumstances:

Areas of known infestations or pathogens

Near sewage outfalls

Near dredging operations

Areas with reduced tidal flushing

In darkness when bottom-dwelling organisms are active

Where propellers may stir up sediment
Clean ballast tanks regularly to remove sediment
Dispose of sediments in accordance with appropriate laws
Minimize discharge amounts
Rinse anchors and anchor chains
Remove fouling organisms from hull, pipes, etc.
Dispose of any removed substance in accordance with laws

Maintain a Ballast Water Management Plan prepared specifically for vessel. Written document on board, specific for your vessel, describing the procedure for ballast management. It should include safety and exchange procedures.
See IMO Resolution A.868 for "Guidelines for the Control and Management of Ship's Ballast Water to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens". Adopted November 1997.

Ballast Water Log outlining ballast water management activities for EACH ballast water tank on board the vessel and shall make the separate ballast water log available for inspection.

Training of vessel master, PIC, and crew regarding the application of ballast water and sediment management and treatment procedures

Mandatory Fee Submission to California's Board of Equalization (916-322-1965)

Each owner/operator shall pay \$200.00 for each qualifying voyage at their first port call in California.

Random Sampling of Vessels for Compliance

Civil and Criminal Penalties for failure to comply with any portion of the Law

2) C A N A D A

NATIONAL REQUIREMENT

Country: CANADA EXISTING JUNE 1998

National Monitoring Authority : Canadian Coast Guard (CCG).

Ports affected: St Lawrence River and Great Lakes ports west of 63° W Longitude

Ships affected: All ships transiting the Eastern Canada Vessel Traffic Services Zones (ECAREG VTS Zone) that are proceeding towards St Lawrence River beyond 63° W Longitude

Implementation: Voluntary application. (But note that mandatory US regulations apply past Massena in New York state, USA)

Date of start: 1st May 1989

Methods acceptable:

Ballast water exchange at sea, as far from land as practicable, in ocean depth greater than 2000 metres.

In exceptional circumstances and for ships which have not left the North American continental shelf on their inbound voyage, the exchange may be made in internal Canadian waters, within the Laurentian Channel and in water depths exceeding 300metres. Such exchanges should be restricted to the area south-east of 63° W Longitude

Unwanted aquatic organisms or pathogens: Not defined, but sediment unwelcome.

Uptake control measures: When pumping out ballast tanks during exchange, the pump should be run until it loses suction

Sampling required: None required by ship. Samples of ballast water may be taken by local authorities to assess the effectiveness of the guidelines

Records required: An entry should be made should be made in the ship's logbook or other suitable documentation, recording the salinity of the ballast water to be discharged in the Great Lakes, and the location, date and time of the ballast water exchange at sea

A ballast water exchange report form will be provided by the pilot boarding at Les Escoumins. It must be completed and passed to the lockmaster at St Lambert Lock or to the USCG if not transiting through that lock

Procedure if en route management is not possible:

Noting in the Canadian guidelines should be constructed as an infringement on the responsibility of a ship's master for the stability and safety of the ship

Procedure if ballast water found to be unacceptable after sampling

Not applicable

For further information refer to:

Voluntary Guidelines for the control of Ballast Water Discharges from Ships proceeding to the St Lawrence River and Great Lakes, published by the Canadian Coast Guard. **Note that special rules apply to ships departing from ports in Lake Superior, with Ballast has been taken in Lake Superior**

Attachments

- **Guidelines for the control of Ballast Water Discharge from Ships in Waters under Canadian jurisdiction**

GUIDELINES FOR THE CONTROL OF BALLAST WATER DISCHARGE FROM SHIPS IN WATERS UNDER CANADIAN JURISDICTION

GUIDELINES FOR THE CONTROL OF BALLAST WATER DISCHARGE FROM SHIPS IN WATERS UNDER CANADIAN JURISDICTION

1.0 Introduction

1.1 The purpose of these guidelines is the protection of waters under Canadian jurisdiction from non-indigenous aquatic organisms and pathogens that can be harmful to existing ecosystems. When a new organism is introduced to an ecosystem, negative and irreversible changes may result including a change in biodiversity. Ballast water has been associated with the unintentional introduction of a number of organisms in Canadian waters and several have been extremely harmful to both the ecosystem and the economic well-being of the nation. These guidelines are intended to minimize the probability of future introductions of harmful aquatic organisms and pathogens from ships' ballast water while protecting the safety of ships.

1.2 Various methods have been proposed for protecting waters under Canadian jurisdiction from harmful aquatic organisms and pathogens that may exist in ballast water. The methods employed must meet the following criteria:

1.2.1 Safety of the ship and its crew must not be compromised.

1.2.2 Techniques utilized shall be effective at minimizing the potential of introduction of harmful aquatic organisms and pathogens from discharged water.

1.3 These guidelines have been developed by Transport Canada and Fisheries and Oceans Canada under the auspices of the Canadian Marine Advisory Council and as such reflect wide consultation with groups such as shipowners, environmental organizations, government departments and the United States Coast Guard.

1.4 In developing these guidelines, consideration and recognition has also been given to the protection of neighboring ecosystems.

1.5 Comments on the guidelines should be addressed to the Ballast Water Working Group of the Canadian Marine Advisory Council at

Tower C, Place de Ville
11th Floor
330 Sparks Street
Ottawa, Ont., Canada
K1A 0N8

c/o Mr. Tom Morris
Tel: 613-991-3170

E-mail: morris@tc.gc.ca
Fax: 613-993-8196

1.6 These guidelines should not be seen as adding to or detracting from existing statutory or regulatory requirements which will prevail in the case of conflict with these guidelines. Statutory provisions dealing with ship-source pollution are included in the *Canada Shipping Act*, the *Arctic Waters Pollution Prevention Act* and the *Fisheries Act*.

2.0 Short Title

2.1 These guidelines may be cited by the short title "The Canadian Ballast Water Management Guidelines".

3.0 Definitions

3.1 For the purposes of these Guidelines:

"exclusive economic zone" consists of an area of the sea beyond and adjacent to the territorial sea of Canada that has as its inner limit the outer limit of the territorial sea of Canada and as its outer limit the line every point of which is at a distance of 200 nautical miles from the nearest point of the baselines of the territorial sea of Canada or as specified in the *Oceans Act*,

"foreign voyage" means a voyage extending beyond the area of a home-trade voyage and not being an inland or minor waters voyage,

"harmful aquatic organisms or pathogens" means non-indigenous aquatic organisms or pathogens which, if introduced into a particular sea area including estuaries or fresh water courses, may create hazards to human health, harm living resources or aquatic life, damage amenities, impair biological diversity or interfere with other legitimate uses of such areas,

"home-trade voyage" means a voyage, not being an inland or minor waters voyage, between places within the area following, namely, Canada, the United States other than Hawaii, St. Pierre and Miquelon, the West Indies, Mexico, Central America and the northeast coast of South America, in the course of which a ship does not go south of the sixth parallel of north latitude,

"home trade voyage, class I" has the same meaning as defined in the *Home-Trade, Inland and Minor Waters Voyages Regulations*, that is a home-trade voyage in the course of which a steamship goes anywhere within the limits of a home-trade voyage as defined in the *Canada Shipping Act*,

"waters under Canadian jurisdiction" means all internal waters of Canada, the territorial sea of Canada and waters in the exclusive economic zone of Canada, including the shipping safety control zones prescribed pursuant to the *Arctic Waters Pollution Prevention Act*.

4.0 Application

4.1 The Canadian Ballast Water Management Guidelines apply to all vessels entering Canada's exclusive economic zone from seaward.

4.2 The effective date for implementation of the guidelines is September 1, 2000.

4.3 These guidelines rescind and supercede the "Voluntary Guidelines for the Control of Ballast Water Discharges from Ships Proceeding to the St. Lawrence River and Great Lakes".

5.0 Consistency with International Guidelines and Other Requirements

5.1 These guidelines are intended to implement the International Maritime Organization's resolution A.868(20), "Guidelines for the Control and Management of Ships' Ballast Water to Minimize the Transfer of Harmful Aquatic Organisms and Pathogens", in waters under Canadian jurisdiction.

5.2 Vessels transiting waters under Canadian jurisdiction bound for Great Lakes ports in compliance with the mandatory ballast water regime of the United States fulfill the requirements of these guidelines.

5.3 Vessels transiting waters under Canadian jurisdiction bound for non-Canadian ports and subject to other national ballast water regimes should complete any ballast water exchange outside waters under Canadian jurisdiction or, in exceptional circumstances, undertake such procedures in the designated

alternative exchange zones. Vessels are reminded of the need to contact the appropriate authorities to ensure conformity with the laws of the country of destination.

6.0 Ballast Water Management Plan

6.1 As noted in section 7.1 of IMO resolution A.868(20), every ship that carries ballast water should be provided with a ballast water management plan. The intent of such a plan is to provide safe and effective procedures for ballast water management.

6.2 The ballast water management plan should be specific to each ship and should be reviewed on the basis IMO Resolution A.868(20) by the flag administration or a recognized organization.

6.3 For flow-through systems, the tank boundary structure for a tank head equivalent to the full distance to the top of the overflow is to be verified.

6.4 For sequential systems, the sequences indicated in the ship's ballast water management plan are to be approved for strength, stability, minimum draught forward and propeller immersion criteria. Sloshing, slamming and ballast inertia are to be dealt with as necessary. Where the criteria are not met, an operational envelope indicating the permissible significant wave heights for various speeds and headings is required to be developed as part of the ballast water management plan.

6.5 The ballast water management plan shall be included in the ship's operational documentation.

6.6 The Model Ballast Water Management Plan developed by the International Chamber of Shipping (ICS) and the International Association of Independent Tanker Owners (INTERTANKO) may be considered an appropriate reference document when developing the plan.

6.7 Canadian ships that carry ballast water and are making home trade voyage, class I or foreign voyages, should forward a copy of their ballast water management plans to the Regional Board of Steamship Inspection.

6.8 It should be noted that the stability of the ship, and any other safety considerations, remain the responsibility of the ship's master. Nothing in these Guidelines should be construed as an infringement upon that responsibility. In cases where ships are not provided with a Ballast Water Management Plan, masters should pay particular attention to the guidance on safety provided in Appendix 2 of IMO resolution A.868(20).

7.0 Reporting Requirements

7.1 With the exception of vessels not destined for a Canadian port, the Master of the vessel shall provide a fully completed ballast water report form as described in Annex 1 by facsimile transmission, or by other means as approved by the appropriate marine communications and traffic services officer.

7.1.1 The Master of the vessel shall provide the appropriate Marine Communication and Traffic Services Centre with the information as requested prior to entry into waters under Canadian jurisdiction.

7.2 Vessels subject to these guidelines that have not submitted a fully completed form in accordance with section 7.1 will be requested to provide the appropriate Marine Communication and Traffic Services Centre with the following information as part of the MCTS interrogative:

- (i) Whether a ballast water reporting form signed by the Master has been provided by facsimile to the appropriate agency (i.e. Transport Canada Marine Safety, port authorities or the U.S. Coast Guard) or has been submitted by electronic or other acceptable means.
- (ii) Whether ballast water is being carried.

- (iii) If the answer to (ii) is affirmative:
- (iv) Whether the vessel has a Ballast Water Management Plan appropriate to that ship.
- (v) Whether the Ballast Water Management Plan has been reviewed by a classification society or flag administration.
- (vi) Whether ballast water management procedures have been performed prior to entering Canada's exclusive economic zone
- (vii) If the answer to (vi) is negative – 1) What is the reason for non performance

2) What procedures, consistent with the appropriate Regional Ballast Water Annex are proposed to protect Canada's waters prior to discharge of ballast.

7.3 In order to monitor information provided in ballast water report forms under this section, vessels may be boarded and samples collected. Delays to the ship shall be minimized when taking such samples and the results of their analysis shall be made available to the ships operator on request.

7.4 Under section 562.19 of the *Canada Shipping Act* it is an offence to refuse to provide information, or to knowingly provide false information to a marine communication and traffic services officer, where such information is requested for the promotion of environmental protection.

8.0 Discharge of Ballast Water

8.1 Subject to the appropriate regional ballast water annex as outlined in section 12, ballast water taken on in areas outside waters under Canadian jurisdiction should not be discharged in waters under Canadian jurisdiction, unless one of the ballast water management options specified in section 9 has been successfully performed.

8.2 In exceptional circumstances where the procedures in 8.1 can not be successfully performed, conditions of discharge may be specified by the appropriate regional authority as noted in Annexes II to V.

9.0 Ballast Water Management Options

9.1 Ballast Exchange

9.1.1 Vessels utilizing ballast exchange should conduct ballast exchange in locations where water depths are not less than 2000 metres, unless otherwise provided in the appropriate Regional Annex.

9.1.2 Alternative Exchange Zones – In exceptional circumstances, where it may not be possible to exchange ballast water due to weather sea or any other conditions the master feels may endanger human life or the safety of the vessel, alternative exchange zones may be utilized on notification of the appropriate marine communications and traffic services officer, as noted in section 7.2(vii). The use of alternative exchange zones may also be appropriate for vessels that are not able to comply with section 9.1.1 because they do not voyage into mid-ocean where water depths are greater than 2000 metres. Masters are advised to consult the appropriate Regional Ballast Water Management Annex.

9.1.3 Sequential Exchange - All of the ballast water should be discharged until suction is lost, and stripping pumps or eductors should be used if possible. Operations shall be logged.

9.1.4 Flow Through Exchange - If flow through methods are employed at least three times the tank volume should be pumped through the tank. Calculations indicating the amount of water to be utilized and pumping rates required to achieve this shall be recorded.

9.2 Non Release of Ballast Water

9.2.1 Ballast water may be retained on board.

9.3 Discharge to reception facilities

9.3.1 Vessels wishing to utilize this option should confirm procedures and availability of this service.

9.4 Alternative Methods

9.4.1 Environmentally sound methods of ballast water treatment that are acceptable to Transport Canada Marine Safety may be utilized. Any alternative method must be at least as effective in removing or killing harmful aquatic organisms and pathogens as the methods listed above.

10.0 Research

10.1 In order to further research into the effectiveness of ballast water management, vessels may be boarded and samples of ballast water may be collected for scientific analysis.

11.0 Ballast Tank Sediment Disposal

11.1 Disposal of sediments as a result of routine cleaning of ballast tanks should be carried out in mid ocean outside Canada's exclusive economic zone in accordance with the ship's ballast water management plan.

11.2 In waters under Canadian jurisdiction, sediments from the ballast tanks of ships trading on foreign voyages should be disposed of in land dumpsites approved for that purpose in accordance with the appropriate legislation or at sea.

11.3 Records shall be maintained of sediment removal in accordance with sections 11.1 and 11.2.

12.0 Regional Implementation

12.1 Recognizing that ecosystems are different within Canada, regional implementation of these guidelines is appropriate to account for differences in trade, ship type, geography, specific exotic species introduction risk, etc. Masters should be governed by the specific regional ballast water management procedures required for their vessel and voyage as outlined in annexes II, III, IV and V.

2 BALLAST WATER

1. VESSEL INFORMATION		2. BALLAST WATER	
Vessel Name:	Type:	IMO Number:	Specify Units: m ³ MT, LT, ST
Owner:	GT:	Cell Stgn:	Total Ballast Water on Board:
Flag:	Arrival Date:	Agents:	Total Ballast Water Capacity:
Last Port and Country:		Arrival Port:	
Next Port and Country:		HAS THIS BEEN IMPLEMENTED? YES <input type="checkbox"/> NO <input type="checkbox"/>	

MAINTAINING WATER TANKS

3. BALLAST WATER TANKS

4. BALLAST WATER HISTORY: RECORD ALL TANKS	BW EXCHANGE
--	-------------

[illegible]

BALLAST WATER TANK CODES: FURPEAK - 1150

IF EXCHANGES WERE NOT CONDUCTED

IF NONE, STATE REASON WHY NOT: _____

5. IMO BALLAST WATER GUIDELINES ON BOARD (MSC.1/Circ.117)
6. CANADIAN GUIDELINES FOR THE CONTROL OF BALLAST WATER
RESPONSIBLE OFFICER'S NAME AND TITLE (PRINTED) AND SIGNATURE

NO

Annex II

Ballast Water Management Procedures for Vessels Proceeding to the West Coast of Canada

1.0 Ballast Water Reporting Forms shall be sent by facsimile to Western Canada Vessel Traffic Services

Facsimile	(604) 666-8453
Phone	(604) 666-6011

2.0 Ports of Vancouver, Nanaimo, and Fraser River

2.1 In addition, vessels entering the Ports of Vancouver, Nanaimo and Fraser River shall be subject to the Harbour Master Department Standing Operating Procedures.

2.2 Compliance with ballast management procedures as set out in section 9 are mandatory.

2.3 Procedures

2.3.1 Harbour Master's representatives when boarding vessel to conduct ballast checks will require to see one of the following:

- 1) Log book entry (in English)
- 2) Abstract of log book entry
- 3) Company or other administration form
- 4) Ballast Water Reporting form as per Appendix 1 giving details of the ballast water management procedure carried out. The details must include the following information:

- position of ballast water exchange - if utilized - giving latitude and longitude
- place where ballast water originally taken on board
- amount of ballast water
- ballast tanks which have had ballast management performed
- details if ballast water management not performed (see note).

Note - It will be a defense against not performing a ballast exchange (if that is the ballast management procedure utilized) at sea for the following reasons

- 1) Stress or weather
- 2) Stability or hull stress concerns - safety is paramount and the Master shall only carry out the procedure if it is safe to proceed.

A copy of the above may be faxed to the applicable Harbour Master's Office

Vancouver	(604) 665-9099
Fraser River	(604) 524-1127
Nanaimo	(250) 753-4899

2.3.2 In the event that the vessel is unable to supply the above information in the prescribed manner, then no ballast water will be allowed to be discharged until the following procedures have been undertaken:

- 1) Samples of ballast water will be drawn and analyzed by a Harbour Master representative.

2) Ballast water found not meeting test standards, will require the vessel depart the port and exchange ballast water in the outgoing current of the north side of Juan de Fuca Strait, west of Longitude 123 degrees 55 minutes west in at least 100 metres of water.

2.3.3 All charges for the movement and delay to the vessel will be for the vessel's account.

2.3.4 Vessels arriving from Ports in British Columbia, Alaska or the West Coast of the United States (North of Cape Mendocino) wishing to discharge ballast water are exempted from these provisions if the ballast water to be discharged originated from these waters. The Harbour Master's representative conducting the ballast check will require to see a log book entry showing where the ballast water originated.

2.3.5 These Procedures will not be applied to vessels wishing to discharge less than 1000 metric tonnes of ballast water. However a Port Representative must be in attendance prior to discharge.

3.0 Alternative Exchange Zone

3.1 In exceptional circumstances as noted in section 9.1.2 of these Guidelines, ballast water exchange may be made in accordance with section 2.3.2(2) of this Annex.

Annex III

**Ballast Water Management Procedure for Vessels Proceeding to the Great Lakes or St. Lawrence River
West of 63 degrees West Longitude**

1.0 Ballast Water Reporting Forms shall be send by facsimile to Eastern Canada Vessel Traffic Services (ECAREG)

Facsimile	(902) 426-4483
Phone	(902) 426-4956
Telex	019 22510

2.0 Vessels are asked to carry out ballast water management procedures as set out in section 9 of these Guidelines.

3.0 Alternative Exchange Zone

3.1 In exceptional circumstances as noted in section 9.1.2 of these Guidelines, ballast water exchange may be made in the internal waters of Canada within the Laurentian Channel in depths exceeding 300 metres. Such internal waters exchanges shall be restricted to the area southeast of 63 degrees west longitude.

3.2 In addition to the requirements above - for those ships that have not left the North American Continental shelf on their inbound voyage, if the ballast management procedure utilized is exchange, such exchange may be made in the internal waters of Canada, within the Laurentian Channel in water depths exceeding 300 metres. As above, such internal waters exchanges shall be restricted to the area southeast of 63 degrees west longitude.

4.0 A record of the salinity of the ballast water to be discharged into the Great Lakes / St. Lawrence River west of 63 degrees West longitude shall be entered in the ships log book.

5.0 Ships entering the Great Lakes / St. Lawrence Seaway system should be aware of the U.S. mandatory ballast water regime and the likelihood of joint boarding at Montreal by representatives of the United States Coast Guard, Transport Canada and the St. Lawrence Seaway.

Annex IV

Ballast Water Procedures for Vessels Proceeding to Ports in Eastern Canada North of 60 degrees North Latitude

1.0 Ballast Water Reporting Forms shall be sent by facsimile to Northern Canada Vessel Traffic Services (NORDREG)

Facsimile	(867) 979-4236
Phone	(867) 979-5724

2.0 Alternative Exchange Zones

2.1 In exceptional circumstances as noted in section 9.1.2 of these Guidelines, ballast water exchange may be made:

- 1) for vessels proceeding to Hudson Bay ports - in Hudson Strait in depths exceeding 300 metres restricted to the areas southeast of 70 degrees west longitude.
- 2) for vessels proceeding to Higher Arctic ports - in Lancaster Sound in depths exceeding 300 metres restricted to the area southeast of 80 degrees west longitude.

Annex V

Ballast Water Procedures for Vessels Proceeding to Ports on the East Coast of Canada

1.0 Reporting

1.1 Reporting requirements under section 7 shall be fulfilled in accordance with the implementation of these guidelines.

1.2 Ballast Water Reporting Forms shall be sent by facsimile to Transport Canada Marine Safety

Facsimile	(902) 426-6657
Phone	(902) 426-7725
E-mail	balaban@tc.gc.ca

1.3 Ballast water exchange and/ or ballast water management information provided will be verified on board the vessels, on a random basis.

2.0 Alternative Ballast Water Exchange Zones (ABWEZ)

2.1 The delineation of suitable alternative ballast water exchange zones and the determination of possible exemptions is subject to scientific studies and consultation with the appropriate scientific authorities. Locations for ABWEZ are being investigated and may be included in the Annex V at a future date. *In the meantime vessels are encouraged to comply with these guidelines as far as it is safe and practicable.*

3.0 Ballast water samples collection

3.1 The master of any vessel is asked to give a researcher collecting ballast water samples all reasonable assistance to enable the sampler to collect relevant ballast water samples and gather information in connection with the ballast water management program. *Information obtained during this process will be used in order to provide the scientific basis for the future development and implementation of Annex V.*

REGIONAL OR SINGLE PORT REQUIREMENT

Region or Port: **VANCOUVER, CANADA**

Monitoring Authority: Vancouver Port Corporation.

Ports affected: Vancouver, Canada.

Ships affected: All ships destined to arrive at the Port of Vancouver in ballast condition.

Exemptions:

- ships wishing to discharge less than 1000 metric tonnes
- Ships arriving from West Coast of USA, Canada and Alaska if the ballast water to be discharged originated from these waters.
- stress of weather
- stability or hull stress concerns.

Implementation: Mandatory application.

Date of start: 1st January 1998.

Methods acceptable:

Ballast water exchange in mid ocean prior to entering Canadian waters. A harbourmaster's representative will require to see either an entry (in English) in the logbook, an abstract of the logbook entry, or other formal record (company or administration). This must include the place where the original ballast was taken on, the position of exchange (latitude and longitude), the amount of ballast on board, and ballast tanks which have had water exchanged.

Unwanted aquatic organisms or pathogens: Not defined.

Uptake control measures: None specified.

Sampling required: Not defined.

Records required: Logbook entry as above.

Procedures if en route management is not possible:

No ballast water to be discharged into harbour until samples have been taken and analysed by the harbourmaster's representative.

Procedure if ballast water found to be unacceptable after sampling:

Retention on board, or departure from port and exchange of ballast in outgoing current of the north side of the Strait of Juan de Fuca, west of Race Rocks.

For further information refer to: Vancouver Port Corporation announcement, dated 10th February 1997, or contact the Harbour Master by telephone (+1 604 666 2405), facsimile (+1 604 666 1072) or E-mail (harbour-master@portvancouver.com).

Attachments

- Maritime information D10-04-012 ' Ballast water management in Canada'

TO : MASTER	MARITIME INFORMATION	DOC. NO. : D10 - 04 - 012
ALL CIDO FLEET		DATE : 1 ST JUN. 2004
		PAGE : 5 (INCLUDING THIS COVER)

TITLE : **BALLAST WATER MANAGEMENT IN CANADA**

CONCERNED VESSEL : **ALL CIDO FLEET**

Dear Master !

The port of Vancouver announced new regulation of Ballast Water was effective from 30th April 2004. Vessels arriving at the port of Vancouver(POV) intending to discharge Ballast water within POV limits are required to carry out a Mid-Ocean Ballast Water Exchange.

1. Harbour Master's representatives when boarding vessel will require from the master to provide either one of the following;

- 1) Ballst water management plan providing guidance for the proper handling and treatment of ballast water and sediment.
- 2) A valid ballst water mamagement plan cert, if the vessel possesses such cert.
- 3) Logbook entry
- 4) Ballst water reporting form giving details of management procedure carried out.

If vessel don't meet the conditions above

- A) Permission to discharge ballast water will be denied.
- B) The harbour master's department may collect samples of ballast water.
- C) The vessel be ordered to depart the POV to carry out a ballast water exchange.

2. The completed Ballast Water Reporting form(Attachment 2) faxed

**TO: CANADA /UNITED STATES COOPERATIVE VESSEL TRAFFIC SERVICES
AT 604-666-8453**

3. Vessel may be exempted from conducting a ballast exchange for the following reason.

- 1) Stress of weather (supported by vessel log information)
- 2) Stability or hull stress concerns

4. Ballast Water originated from the ports as follows are not required to follow these procedures.

- 1) North of Cape Blanco(Oregon- 4250N, 12433W in the West coast of the US)
- 2) British Columbia
- 3) Alaska

**Attachments : 1. Ballast water exchange & management
2. Ballast water reporting form**

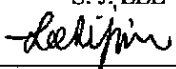
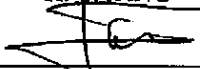

Refer to : Technical inf: D10-01-008

BEST REGARDS.

READERS/SIGNATURE :

C/O: _____ 2/O: _____ 3/O: _____

EDUCATOR:

	PREPARED BY	REVIEWED BY	APPROVED BY
SIGNATURE	S. J. LEE 	H. C. JANG 	DP. C. Y. JUN 
DATE	2004. 06. 01	2004 JUN. 01	JUNE 1st 2004

CIDO.

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4.0 BALLAST WATER

4.1 Ballast Water Management

4.1.1 Definitions

For the purpose of these procedures:

“Ballast Water” means water with its suspended matter taken on board a ship to control trim, list, draught, stability or stresses of a ship.

“Ballast Water Management Plan” is defined as a plan for the handling or treatment of Ballast Water on board ship or ashore to minimize the transfer of harmful organisms and pathogens in the vessel’s ballast water and sediment.

4.1.2 Application

Vessels arriving at the Port of Vancouver (“POV”) intending to discharge Ballast Water within POV limits are required to carry out a Mid-Ocean Ballast Water Exchange unless section 4.5 applies.

The purpose of these procedures is to limit the possibility of transferring non-indigenous species into Canadian waters while protecting the safety of ships. The intent of POV’s Ballast Water Management Procedures is consistent with the International Maritime Organization’s resolution A.868 (20).

4.2 Compliance monitoring.

Harbour Master’s Representatives when boarding vessels will require from the master or his representative to provide either one of the following:

1. A Ballast Water Management Plan providing guidance to the operators for the proper handling and treatment of ballast water and sediment to minimize the transfer of harmful aquatic organisms and pathogens in the vessel’s ballast water and sediment.

The Ballast Water Management Plan must be ship specific and include the following:

- Information about vessel’s ballast system and Ballast Water sampling points;
- Explanations and procedures of the methods utilized in the Ballast Water Management Plan; and
- Safety precautions for each method utilized.

OR:

2. A valid Ballast Water Management Plan **Certificate** issued by the classification society indicating the appropriate BWMP notation - if the vessel possesses such certificate.
3. Logbook entry
4. Ballast Water Reporting Form giving details of the ballast water management procedure carried out.

The completed Ballast Water Reporting Form must be faxed to CANADA/UNITED STATES COOPERATIVE VESSEL TRAFFIC SERVICES at 604-666-8453. However, a Harbour Master Representative must be in attendance or give verbal authorization prior to the discharge.

4.3 Non-compliance procedures

- Permission to discharge Ballast Water will be denied to a vessel that has not conducted a ballast exchange or is unable to provide evidence as described in 4.2.
- The Harbour Master's Department may collect samples of Ballast Water and have these samples analyzed to determine the quality of exchanged ballast.
- Denial of permission to discharge Ballast Water that does not meet these requirements may result in the vessel being ordered to depart the POV in order to carry out a Ballast Water exchange to the satisfaction of the VPA.

4.4 Coastal traffic

- Ballast Water originating from the ports north of Cape Blanco (Oregon-42°50'N, 124°33'W in the West Coast of the US), British Columbia and Alaska are not required to follow these procedures. The Harbour Master's Representative conducting the ballast check will require seeing the logbook entry showing where the Ballast Water originated.

4.5 Exemptions

4.5.1 Safety

A vessel may be exempted from conducting a ballast exchange for the following reasons:

- Stress of weather (supported by vessel log information)
- Stability or hull stress concerns – safety is paramount and the Master will only be required to carry out the exchange in a safe manner consistent with the vessel's Ballast Water Management Plan.

4.5.2 Treatment

4.5.3

- Environmentally sound methods or technologies of Ballast Water treatments that have acquired interim approval from the relevant maritime administration may be considered instead of mid-ocean ballast exchange. In this case, Harbour Master's Office must be notified and relevant information provided at least 24 hours prior to vessel's arrival in Vancouver.
- Until such time an international regulatory regime with standards and test protocols for Ballast Water treatment has been established the decision will be made under guidance from relevant agencies.

4.5.4 Discharge to reception facilities

Vessels planning to rely on this option are responsible for arranging and confirming the availability of this service.

2. BALLAST WATER

2. BALLAST WATER

NAME: _____ ADDRESS: _____

DATE: _____

QUESTIONS

1. HAS THIS BEEN IMPLEMENTED? YES _____ NO _____

2. BALLAST WATER MANAGEMENT PLAN ON BOARD? YES _____ NO _____

3. _____

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99. _____

100. _____

NO.	HAS THIS BEEN IMPLEMENTED?
1	YES
2	YES
3	YES
4	YES
5	YES
6	YES
7	YES
8	YES
9	YES
10	YES
11	YES
12	YES
13	YES
14	YES
15	YES
16	YES
17	YES
18	YES
19	YES
20	YES
21	YES
22	YES
23	YES
24	YES
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83	YES
84	YES
85	YES
86	YES
87	YES
88	YES
89	YES
90	YES
91	YES
92	YES
93	YES
94	YES
95	YES
96	YES
97	YES
98	YES
99	YES
100	YES

NO. OF TANKS NOT EXCHANGED

BE DEBALLASTED IN PORT STATE OF ARRIVAL; IF NONE GO TO NO. 5

IF EXCHANGES WERE NOT CONDUCTED, STATE OTHER CONTROL ACTIONS TAKEN:

IF EXCHANGES WERE NOT CONDUCTED, STATE OTHER CONTROL ACTION(S) TAKEN:

IF NONE, STATE REASON WHY NOT:

5. **NO BALLAST WATER GUIDELINES ON BOARD RES. A 888(20)?** YES _____ NO _____

DOES YOUR VESSEL COMPLY WITH THE CANADIAN GUIDELINES FOR THE CONTROL OF BALLAST WATER DISCHARGE FROM SHIPS IN WATERS UNDER CANADIAN JURISDICTION ON BOARD? YES _____ NO _____

RESPONSIBLE OFFICER'S NAME AND TITLE (PRINTED) AND SIGNATURE

3) A U S T R A L I A

NATIONAL REQUIREMENT

Country: **AUSTRALIA**

National Monitoring Authority: Australian Quarantine and Inspection Service.

Ports affected: All

Ships affected: All ships entering Australian ports from overseas territories.

No exceptions specified.

Implementation: Mandatory

Date of start: 1 July 2001

Methods acceptable:

Non-discharge of "High risk" ballast tanks in Australian ports or waters

Tank to tank transfer

Full ballast water exchange at sea

Case-by-case consideration of other comparable treatment methods

Exchange at sea must be undertaken to a minimum 95% volumetric exchange using one of the following methods;

-Flow through

-Sequential (empty / refill)

-Dilution

Unwanted aquatic organisms or pathogens: Target list available from AQIS.

Sediment unwelcome.

Uptake control measures:

Minimize uptake of silt.

Where practicable, avoid taking ballast:

- in shallow water,
- in vicinity of dredging operations,
- where there is a known outbreak of disease communicable through ballast water,
- where phytoplankton blooms are occurring.

Sampling required: Targeted, random and mandatory, under supervision of AQIS officer.

BWM Reporting : Masters are required to send the QPAR(Quarantine Pre Arrival Report) to AQIS Between 12 ~ 48 hours prior to arrival in Australia – usually via ships' local agent

Records required: Record time, location, volume and salinity of all ballast water loaded, exchanged at sea, and discharged.

Completed forms must be retained on the vessel for a period of two years and produced to AQIS on request

Procedures if en route management is not possible:

As per Australia's New mandatory ballast water requirements

Procedure if ballast water found to be unacceptable after sampling:

Ship proceed to designated area or open sea to exchange ballast.



Australian Government

Australian Quarantine and Inspection Service

Australian Ballast Water Management Requirements

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Introduction

On July 1 2001, Australia introduced mandatory ballast water management requirements (the requirements) to reduce the risk of introducing harmful aquatic organisms into Australia's marine environment through ship's ballast water.

Background

The Australian Quarantine and Inspection Service (AQIS) is the lead agency for the management of ballast water taken up overseas. Part of AQIS' charter is to ensure that foreign ballast water has been managed in accordance with the requirements before permitting its discharge inside Australia's territorial sea (12 nautical limit generally applies).

The requirements incorporate a 'Ballast Water Decision Support System' (BWDSS) - a computer application that can provide vessels with a risk assessment of their ballast water and deem it to be acceptable for discharge or otherwise. Use of the BWDSS is not mandatory.

Any ballast water that has been exchanged at sea by an approved method is deemed to be acceptable for discharge in Australian ports / waters.

Revised ballast water reporting and verification systems also form an integral part of Australian requirements.

Australian ballast water management requirements are consistent with International Maritime Organisation (IMO) Guidelines for minimising the translocation of harmful aquatic species in ships' ballast water.

Safety of vessels and crews are of paramount importance. Vessels undertaking ballast water management to comply with Australian requirements should do so in accordance with the IMO Guidelines.

Australia's new ballast water management requirements have legislative backing and will be enforced under the *Quarantine Act 1908*.

What the new arrangements mean for the shipping industry

Mandatory ballast water management requirements

All internationally trading vessels are required to manage their ballast water in accordance with AQIS requirements. **The discharge of high-risk ballast water in Australian ports or waters is prohibited.**

High Risk Ballast Water

AQIS deems all salt water from ports (or coastal waters) outside Australia's territorial sea to present a "high-risk" of introducing exotic marine pests into Australia. The discharge of high-risk ballast water from ships is prohibited anywhere inside Australia's territorial seas (12 nautical mile limit generally applies).

Ballast water of the following types is deemed by AQIS to be "low-risk":

- Fresh Water from any source
- Ballast Water that has been assessed as "low-risk" for discharge (at specified ports / locations on specified dates) by the BWDSS
- Ballast Water that has been exchanged at an approved location (mid-ocean) by an approved method
- Ballast Water taken up in mid-ocean
- Ballast Water taken up inside Australia's territorial seas*.

**AQIS is a Federal Government agency. AQIS ballast water management requirements do not regulate ballast water taken up inside Australia's territorial sea. Victoria, one of six Australian States, has additional requirements for the management of ballast water. These additional requirements are enforced by the Victorian State Government and involve management and reporting of ballast water taken up in Australian waters. At the time of printing, Victorian State requirements regulate the discharge of Australian domestic ballast water only in the port of Hastings (Western Port). The Victorian State Government plans to roll out the Hastings requirements to each of its other three commercial ports (viz: Melbourne, Geelong and Portland) later in 2004. Australia's other State / Territory Governments may enact similar laws in the future to regulate the movement of Australian domestic ballast water.*

Mariners should ascertain if any State / Territory Government ballast water management requirements (over and above AQIS' requirements) need to be met for calls at any Australian port on their vessel's itinerary.

Ballast water management options

Mariners may elect to use any of the following ballast water management options – which have all been approved by AQIS:

1. Ballast Water Decision Support System (BWDSS)

Receive a tank-by-tank risk assessment from the BWDSS that deems the ballast water on board to be low-risk. Instructions for the use of the BWDSS may be found in the BWDSS Instruction Guide included in this information package.

2. Non-discharge of 'high-risk' ballast water in Australian ports or waters

Vessels that do not need to discharge any ballast water in Australian waters do not need to carry out any management of foreign ballast water. Mariners are cautioned that permission to discharge high-risk ballast will not be given under any circumstances. It is therefore considered prudent to manage all ballast water on board a vessel as if it may need to be discharged in Australian waters. In the event of unforeseen circumstances, whereby it becomes necessary to discharge some ballast water, permission to do so may be sought and granted provided the ballast water in question has been managed to make it low-risk prior to arrival in Australian waters.

Vessels carrying high-risk ballast water through Australian ports may be required, at their own expense, to employ independent marine surveyors on arrival and departure from Australia to formally certify that no high-risk ballast water has been discharged during the vessel's visit to Australia.

3. Tank-to-tank transfer

It is permissible to move high-risk ballast water around from tank-to-tank within a ship. Masters of vessels that use this procedure must be vigilant to ensure that the risk of unauthorised ballast discharge, during ballast transfer operations, is assessed and managed appropriately.

4. Full ballast water exchange at sea

- Sequential exchange (empty/refill) method
- Flow through method
- Dilution method.

Each of these methods has been tested and has demonstrated results of achieving the necessary 95% (or better) volumetric exchange of high-risk ballast water. Ballast exchanges **must** be conducted outside the Australian 12 nautical mile limit. It is also **recommended** that ballast exchanges be conducted as far as possible away from shore and in water at least 200m deep.

• **Sequential Exchange (empty / refill):** This method involves emptying tanks (a few at a time) of high-risk ballast water at sea before refilling them with clean water from the deep ocean. It is important to ensure that the ballast mix achieved by this method contains no more than 5% of high-risk ballast water.

Soundings of tanks should be recorded at the end of the 'emptying phase' so that the make up of the ballast mixture may be verified by AQIS on arrival in an Australian port.

Not all ships are able to empty ballast tanks at sea for safety reasons. Masters should ensure their ships' safety at every stage of a sequential exchange operation.

• **Flow-Through Method:**

300% of a tank's full capacity of clean water from the deep ocean must be pumped into each tank to achieve an acceptable 95% volumetric exchange.

Even when, at the start of a flow through operation, a tank is only partially filled with high-risk ballast water, **300% of full capacity** must still be pumped into the tank to comply with Australian requirements. The 300% capacity is measured from when water begins to flow into a tank. In the case of a tank that is not completely full at the commencement of a flow through operation, 300% of the tank's full capacity still starts to be measured from when the pumps are started – not from when the tank starts to overflow.

AQIS will seek to verify that ballast exchanges have been properly carried out in accordance with the law. The verification process is an examination of records about ballast exchange operations that are kept by the ship.

Masters should pay attention to the following when conducting flow-through ballast exchanges:

Tanks may be flushed one at a time or in similar pairs. For example: Double Bottom Tanks 1 Port and Starboard may be pumped simultaneously using the same pump. It is not acceptable to flush dissimilar pairs of tanks (e.g. DBT1 P and DBT 2S) together. The reason for this is that dissimilar tanks being flushed together using a single pump would receive unequal quantities of water from the pump.

Estimating the quantity of water flushed through each tank involves estimating the delivery rate of ballast pumps and timing the hours of running of those pumps. It should be noted that pumps might not deliver their rated capacity – due to wear and tear on pumps / pipes etc. Masters should ensure that the pump delivery rate used in exchange calculations is the rate that has been experienced during recent ballast operations.

Actual pump delivery rates may be determined by observing the time it takes to pump a known quantity of water (eg. timing how long it takes from starting to fill an empty tank until it overflows).

Masters should ensure that ballast tanks are not pressurised beyond design specifications when using the flow-through method.

• **Dilution Method:**

Some vessels (mainly tankers) are fitted with extra piping / pumping arrangements. On some of these vessels, ballast may be pumped in through one side of a tank and out through the other simultaneously (pumping in / pumping out - as opposed to pumping in / simply overflowing out).

Flushing using two pumps is acceptable. As for "flow-through", 300% of each tank's full capacity must be flushed through for an acceptable exchange.

Safety Considerations

Where full ballast water exchange has not been undertaken due to safety reasons (weather, sea conditions or operational impracticability), the Master should report this to AQIS as soon as possible and certainly prior to entering Australia's territorial sea (12 nautical mile limit generally applies). Under no circumstances should this information be sent to AQIS any later than

transmission of the *Quarantine Pre-Arrival Report (QPAR)*. The QPAR must be forwarded to AQIS between 12 and 48 hours prior to arrival at an Australian port (see addresses at the end of this document).

Alternative Ballast Water Management Methods

Vessels wishing to use alternative methods not specified above should apply in writing to AQIS before the event. Vessels arriving in Australian ports without having managed their ballast by an approved method (see above) are likely to be refused permission to discharge their ballast water in Australian waters.

Ballast Water Reporting

All vessels arriving in Australia from international waters are required to submit a *Quarantine Pre-Arrival Report (QPAR)* to AQIS. The QPAR requires details about the vessel including:

- Vessel particulars
- Human health
- Pet animals / birds on board
- Recent visits by the vessel to places where organisms of concern to Quarantine are known to exist.

The QPAR also requires reporting of ballast water management procedures undertaken.

Masters are required to send the QPAR to AQIS between 12 – 48 hours prior to arrival in Australia – usually via ships' local agents. This timing allows for efficient processing of the QPAR to assist in avoiding any disruption to a vessel's schedule.

Masters / agents that do not submit the QPAR to AQIS will not be given formal quarantine clearance to enter port. This will cause delays to the vessel and additional AQIS charges to the vessel will be incurred.

No ballast water may be discharged from internationally trading vessels in Australian waters without express **written** permission from AQIS. Such permission may be given following lodgement of the QPAR with AQIS – provided acceptable ballast water management is reported on the QPAR. If details / intentions about discharge of international ballast water (as originally submitted to AQIS) change for any reason, a revised QPAR must be sent to AQIS prior to discharging any ballast water that has not already been specifically authorised.

Masters must also complete the *AQIS Ballast Water Log* with details about ballast water uptake ports, BWDSS usage, ocean exchanges and intended Australian discharge locations.

This form needs not be sent to AQIS under normal circumstances – AQIS Officers will examine it during their physical attendance on board each vessel. Completed forms must be retained on the vessel for a period of two years and produced to AQIS on request.

Verification Inspections

AQIS Officers will conduct ballast water verification inspections on-board vessels to ensure compliance with Australia's ballast water management requirements.

AQIS Officers will use the QPAR, BWDSS results (if available), AQIS ballast-water logs and the vessel's deck and engineering logs to verify that the information supplied to AQIS is correct.

The verification inspection will take around 30 minutes to complete and in most cases will be conducted at the same time as a routine vessel inspection.

Co-regulation

It is envisaged that, in the future, Co-regulatory Agreements covering all aspects of Australian Quarantine requirements will be available to vessels that regularly visit Australian ports and have demonstrated a good quarantine compliance history.

Co-regulatory Agreements will set out the details of Quarantine concerns, how they will be managed and who will bear responsibility for ensuring that subject vessels comply with AQIS requirements.

Co-regulatory Agreements will be subject to formal audit by AQIS on a regular basis.

Co-regulatory Agreements are not available at the moment. Due to the recent outbreaks of Foot and Mouth disease around the world, AQIS will inspect every vessel arriving in Australian ports from overseas, until further notice.

Tank stripping

Sediments from ballast tanks must not be discharged in Australian waters.

Ballast tank stripping using pumps that are permanent fixtures on a vessel is acceptable. The use of portable pumps to strip out ballast tanks or manual removal and dumping of sediment in Australian ports / waters is not permitted.

Access to sampling points

Masters must provide access to safe ballast water sampling points on board their vessels.

Ballast water samples may be required to ensure compliance with Australia's ballast water management requirements or for further ballast water research.

Where a ballast water sample is required, AQIS Officers will avoid delays to vessels wherever possible. AQIS will endeavour to give prior warning to vessels – via their Australian agents – in the event that the necessity to obtain a ballast water sample is anticipated.

Ballast Water Exchange Calculations

Acceptable ballast water exchanges must achieve at least a 95% dilution of high-risk ballast water with clean seawater from the deep ocean.

Sequential Exchange (Empty / Refill) Operations:

At least 95% of the water in a given tank must have been drawn from the deep ocean on arrival in Australia. Residual high-risk ballast that remains in a tank at the end of the "Emptying" phase of an exchange operation must be less than 5% of the total volume contained in the tank on arrival in Australian waters.

Masters are requested to record a sounding and corresponding volume of residual water at the end of the emptying phase of sequential exchange operations. Masters are also requested to record

times, dates, locations and methods used (gravity / pumps / combination of gravity and pumps) to empty and refill all tanks managed by this method.

Sequential Exchange Calculation Example 1:

A vessel has a Fore Peak ballast tank with full capacity 2000m³. The vessel's Master wishes to arrive in an Australian port with the Fore Peak only half full (1000m³). Regardless of how much "high-risk" water is in the tank before the exchange, the water in the tank must be exchanged so that after refilling, not more than 5% of the resulting mixture in the tank is "high-risk" water. After pumping out (when suction on the pump is lost), a sounding of the tank is taken and this shows that only 5 m³ remains.

In this situation, provided at least 95 m³ of deep ocean water is added to the FPT, the resultant mixture will be acceptable for discharge in Australian waters. The Master may fill the tank only to his desired volume of 1000 m³ and the ballast water in the tank requires no further management.

Sequential Exchange Calculation Example 2:

A vessel has a centre line, double bottom tank beneath No.1 Cargo Hold (DB1C) with full capacity 6000 m³. The vessel's Master wishes to arrive in an Australian port with DB1C only filled to one third of its capacity (2000 m³).

After pumping out (when suction on the pump is lost), a sounding of the tank is taken and this shows that 250 m³ remains in the tank.

To achieve a 95% volumetric exchange in this tank, the Master has two options:

- i) Fill the tank up to 5000 m³ and then pump out water until his desired level of 2000 m³ is reached.
- ii) Strip the tank until only 100 m³ remains before refilling the tank to 2000 m³

Flow-Through and Dilution Operations:

300% of the full capacity of every tank exchanged by either of these methods must be pumped into the relevant tank - using clean seawater from the deep ocean.

Critical to the efficiency of this method are the following:

- Only similar pairs of tanks may be flushed through simultaneously
- Pumping hours to achieve the required 300% exchange should be calculated using the experiential pumping rate of ballast pumps rather than the "pumping capacity" of the new pumps as stated in manufacturers specifications. A pumps' efficiency usually decreases with age.

If a tank initially contains more than 5% of its full capacity of high-risk ballast water, 300% of the tanks full capacity must be pumped in to achieve the required 95% volumetric exchange.

Flow Through / Dilution Calculations:

A cape sized vessel (150,000 DWT) with nine cargo holds, has the following ballast tanks:

Tank / Hold	Capacity	Contents
Fore Peak	2000 m ³	1000 m ³
WBT 1P	3000 m ³	Full
WBT 1S	3000 m ³	Full
WBT 2P	4200 m ³	Full
WBT 2S	4200 m ³	Full
WBT 3P	3000 m ³	1200 m ³
WBT 3S	3000 m ³	Full
WBT 4P	4200 m ³	Full
WBT 4S	4200 m ³	Full
After Peak	1200 m ³	800 m ³
CH #5	21750 m ³	20150 m ³

The ten-year-old vessel is fitted with two main ballast pumps each with a rated capacity of 2500 m³/hr when the vessel was new. From experience, the Chief Officer believes that each of these pumps now delivers about 2000 m³/hr. The Chief Officer has timed (and recorded details of) a number of ballast filling / emptying operations to determine this pumping rate.

Example 1:

Fore peak tank initially contains 1000 m³ of high-risk ballast water. Master wishes to exchange the tank's contents in mid-ocean using the flow through method.

300% of the tanks full capacity (i.e. $3 \times 2000 \text{ m}^3$) = 6000 m³.

Using only one pump, the Master must pump clean seawater into the tank for 3 hours. Using two pumps together, the required pumping time would be halved (90 minutes).

1 Pump delivers 2000 m³/hr = 6000 m³ in 3 hours = 300% of tank's FULL capacity.

2 Pumps deliver 4000 m³/hr = 6000 m³ in 1.5 hours = 300% of tank's FULL capacity.

Example 2:

Master wishes to use flow through method on WBT 1P, WBT 1S, WBT 2P and WBT 2S.

a) Acceptable:

Using both ballast pumps together the master simultaneously flushes WBT 1P and 1S simultaneously for 4.5 hours (combined capacity of 1P&S = 6000 m³, 4.5 hours pumping @ $2 \times 2000 \text{ m}^3/\text{hr} = 18000 \text{ m}^3 = 300\%$ of each tank's full capacity).

After the ballast exchange in WBT 1P and S, those tanks are closed off and a new exchange begins on WBT 2P and S simultaneously.

b) Unacceptable:

Master uses both pumps to flush WBT 1P&S and WBT 2P&S simultaneously for 21.6 hours: The pumps deliver the same quantity of water but it is impossible to say how much water each tank received if this procedure is used.

Commonwealth of Australia Quarantine Act 1908

Michellands No.:

3. BALAST WATER:

Total Ballast on Board (in tonnes):

Total Ballast Capacity (in tonnes):

Total number of ballast tanks:

(i)	Port:	Country:
(ii)	Port:	Country:
(iii)	Port:	Country:

NO. refer to 1 2 3 and 7 only

[illegible][illegible]

TANK CODES: Full Tank = F Forepeak = FP Aftpeak = AP Double Bottom = DB Wing = WJ Upside = U Downside = D

NOTE: Ballast Water History of any ballast water tanks for which

6. IF EXCHANGES WERE NOT CONDUCTED IN ANY OF THE
 YEARS, PLEASE STATE REASON WHY NOT _____ (Circle One)

TANKS/HOLDS LISTED ABOVE, PLEASE STATE NUMBER	YES / NO	(Circle One)
1	YES	1
2	NO	2
3	YES	3
4	NO	4
5	YES	5
6	NO	6
7	YES	7
8	NO	8
9	YES	9
10	NO	10
11	YES	11
12	NO	12
13	YES	13
14	NO	14
15	YES	15
16	NO	16
17	YES	17
18	NO	18
19	YES	19
20	NO	20
21	YES	21
22	NO	22
23	YES	23
24	NO	24
25	YES	25
26	NO	26
27	YES	27
28	NO	28
29	YES	29
30	NO	30
31	YES	31
32	NO	32
33	YES	33
34	NO	34
35	YES	35
36	NO	36
37	YES	37
38	NO	38
39	YES	39
40	NO	40
41	YES	41
42	NO	42
43	YES	43
44	NO	44
45	YES	45
46	NO	46
47	YES	47
48	NO	48
49	YES	49
50	NO	50
51	YES	51
52	NO	52
53	YES	53
54	NO	54
55	YES	55
56	NO	56
57	YES	57
58	NO	58
59	YES	59
60	NO	60
61	YES	61
62	NO	62
63	YES	63
64	NO	64
65	YES	65
66	NO	66
67	YES	67
68	NO	68
69	YES	69
70	NO	70
71	YES	71
72	NO	72
73	YES	73
74	NO	74
75	YES	75
76	NO	76
77	YES	77
78	NO	78
79	YES	79
80	NO	80
81	YES	81
82	NO	82
83	YES	83
84	NO	84
85	YES	85
86	NO	86
87	YES	87
88	NO	88
89	YES	89
90	NO	90
91	YES	91
92	NO	92
93	YES	93
94	NO	94
95	YES	95
96	NO	96
97	YES	97
98	NO	98
99	YES	99
100	NO	100

7. BALLAST WATER MANAGEMENT PLAN ON BOARD:

RESPONSIBLE OFFICER'S NAME AND TITLE PRINTED / AND SIGNED _____
_____ liable to a significant fine and/or imprisonment under Australian Law



Australian Government

Australian Quarantine and Inspection Service

Advice to Ships Masters on Ballast Water Record Keeping

In order to comply with Australian Ballast Water management requirements, ships' Masters must record the following ballast water information in the ship's deck, engine room and/or dedicated ship's ballast water logbook. AQIS will seek to verify reported ballast water management during the routine inspection that is usually conducted at every vessel's first port of arrival in Australia. Properly kept ships' records of ballast water management greatly assist vessels to avoid disruption to their schedules in Australian ports / waters.

The required records of ballast water management must be produced for inspection at any Australian port of call when requested by a Quarantine Officer. The records are to be maintained in a clear and concise manner. All AQIS reporting forms must be completed in English and be held on board the ship for a period of no less than two years.

Approved ballast water exchange methods are described in the document: 'Australian Ballast Water management requirements'.

INFORMATION TO RECORD ABOUT BALLAST OPERATIONS:

BW uptakes overseas:

- record start and finish dates, times and locations (24 hour clock, local time, locations recorded either as a port of uptake or in latitude and longitude co-ordinates)
- record the volume of all BW taken on board.

BW exchanges in the deep ocean:

All Methods:

- record start and finish dates, times and locations (24-hour clock, local time, locations recorded as latitude and longitude co-ordinates). Exchanges must be conducted outside the Australian 12 nm limit. AQIS recommends that ocean exchanges should be conducted well away from any land mass and in water of minimum depth 200m.
- method of exchange: acceptable methods at time of publication are: Empty / Refill; Flow-Through and; Dilution.
- depth of water where BW exchanges were conducted (recommended minimum depth 200 metres)
- BW pump/s used during each ballast operation
- records of BW pumps' performance to demonstrate experiential pumping capacity)

- amperage or kilowattage of the ships generators before, after and during the ballast operation
- BW exchange percentage
- date when the BW sea suction strainers were last inspected. Are they in good order and repair?
- record damage / repairs made to the BW equipment (including ballast pumps, tanks, piping etc)
- full capacity and actual volume of the BW tank being exchanged .

For Empty / Refill method:

Record tank soundings / residual volume at end of emptying cycle

For Flow-Through and Dilution Methods:

Calculate and record total volume of water pumped for every tank and determine percentage flushed through (must be at least 300% of each tank's FULL capacity).

AQIS DOCUMENTATION TO BE MAINTAINED AND HELD ON BOARD THE SHIP FOR A PERIOD TWO YEARS:

- all Quarantine Pre-Arrival Reports
- all ships ballasting information entered into the Australian Ballast Water Decision Support System (including lodgements sent by e-mail and Inmarsat-C)
- AQIS Ballast Water Log
- AQIS documents releasing ballast water from quarantine when in Australian waters and any quarantine directions issued by a quarantine officer (where applicable).
- details of any ballast water treatment/exchange performed prior to entering Australian ports or waters and any other information relating to the ships current BW arrangements (for the purpose of AQIS compliance verification)
- details of any unusual events regarding ballasting operations en-route to Australia.

Ballast Water Management Plans (BWMP):

While it is not an AQIS requirement for ships to have a Ballast Water Management Plan (BWMP) when entering Australian ports or waters, AQIS recommends that vessels develop BWMPs in accordance with IMO guidelines. The recommended methodology for vessels wishing to develop a BWMP is the International Marine Organisation (IMO) 'Model Ballast Water Management Plan' as per IMO Resolution A.868 (20).



Australian Government

Australian Quarantine and Inspection Service

PLEASE PHOTOCOPY AS REQUIRED

AQIS BALLAST WATER LOG

Commonwealth of Australia Quarantine Act 1908 Section 27A

Ship's Name: _____

Year Built _____

IMO/Lloyd's No.: _____

Call Sign _____

Master's Signature: _____

Date: _____

/

/

PAGE _____ of _____

1) Did you use the Ballast Water Decision Support System (BWDS)?

☐ Yes, If Yes, enter 7-digit Risk Assessment Number (RAN): _____

For tanks assessed as LOW risk: complete columns A, B and D

For tanks assessed as HIGH risk: complete columns A, B C and D

☐ No, If NO, complete columns A, B, C and D

Instructions for Exchange:

Exchange must be carried out to 95% volumetric exchange for empty/refill method and 300% for flow-through or dilution method. Please fill in either the Empty/Refill column or the Flow-Through column depending on which method you used for each tank (only one method per tank is acceptable)

Record ocean depth at which exchanges occurred (metres): Min: _____ Max: _____

(A) Ballast Water Tanks or Cargo Holds		(B) Ballast Water Source			(C) Exchange					(D) Intended Australian Discharge Port for Ballast Water					
Tank	Full Capacity (m³)	BW uptake PORT	Uptake Date	Volume of ballast water taken up (m³)	Identify the pumps used for ballasting and their estimated current delivery capacity per hour (m³/hr):					BW Discharge Port	Discharge Date	Volume for discharge (m³)			
					Pump 1:	Pump 2:	Pump 3:	Exchange Date & Time	List Pumps Used (Pump Number)	Empty/Refill ONLY Residual volume when empty (m³)	Flow-through or Dilution ONLY Volume pumped (m³)	Percentage Exchanged			
					Start (S) End (E)	Exchange Location (Latitude/Longitude)		Start (S) End (E)							
Eg FPT	1342	Osaka	21/2/03	1342	S: 03° 18' N E: 03° 15' N	137° 24' E 140° 36' E	S: 28/02/03 E: 28/02/03	1600 2030	1 & 2 (24/50m³/hr)	N/A	4050	302%	Brisbane	05/03/03	1342
					S:		S:								
					E:		E:								
					S:		S:								
					E:		E:								
					S:		S:								
					E:		E:								
					S:		S:								
					E:		E:								
					S:		S:								
					E:		E:								
					S:		S:								
					E:		E:								

BALLAST WATER TANK CODES: Forepeak = FPT Aftpeak = APT Double bottom = DB Bottom tank = BT Bottom side tank = BST Deep tank = DT Wing tank = WT Top side tank = TST Cargo hold = CH
Heeling tank = HT Water ballast tank = WBT Port = P Starboard = S Centre = C Bilge = BGT Other = O (specify)

Ships completing this AQIS BW log must also enter the ballast water information into the ship's deck and engineering logbooks. A ship's logbook must be made available for inspection by a Quarantine Officer at any Australian port or any location within the Australian 12nm limit.

Form 026 - Date of Effect 01 March 2004

4) NEW ZEALAND

NATIONAL REQUIREMENT

Country: **NEW ZEALAND**

National Monitoring Authority: New Zealand Ministry of Fisheries.

Ports affected: All

Ships affected: All ships entering New Zealand territorial seas carrying ballast water loaded within the territorial water of another country. No exceptions are listed.

Implementation: Compliance with guidelines requiring mid-ocean exchange of ballast water. An import health standard for ballast water came into effect on 30 April 1998, applying to ballast water loaded in another country and due for discharge in New Zealand. It requires that ballast water to be discharged has been exchanged in mid-ocean.

Use of reporting form prior to arrival in first New Zealand port, and on departure from final New Zealand port, is mandatory. Examples of the arrival and departure forms are given opposite.

Date of start: 1996. Mandatory measures from 30 April 1998.

Methods acceptable:

1. Ballast water exchange in deep water.
2. Use of fresh water in ballast tanks (<2.5ppt NaCl).
3. Use of approved on-shore treatment facility (none approved yet).
4. Use of approved in-tank treatment (none approved yet).
5. Discharge into an approved low risk zone (none approved yet).

Unwanted aquatic organisms or pathogens: Not defined.

Uptake control measures: None specified. However, masters are expected to use their discretion and care when loading ballast water, avoiding where possible, taking ballast in shallow water, in areas where there are known to be active algal blooms or an outbreak of any disease communicable through ballast water, and in the vicinity of dredging operations.

Sampling required: Not defined.

Records required: Location and volume of ballast water loaded in other port;
location, volume, method and duration of exchange at sea;
location, volume and date of discharge in New Zealand.

Procedures if en route management is not possible: Until other treatment options are available, discharge will be permitted if it can be shown that weather conditions and/or vessel design precluded safe exchange, and the ballast water for discharge was not loaded in an area listed in Annex 1 of the Import Health Standard (currently Tasmania and Port Philip Bay, Australia).

For further information refer to:

New Zealand Import Health Standard for Ballast Water from All Countries.

New Zealand Ballast Water and Ships Hull De-fouling: a Government Strategy January 1998.

Attachments :

- BWM Reporting form

BALLAST WATER DECLARATION: PART 1

TO BE COMPLETED FOR ALL VESSELS ARRIVING IN NEW ZEALAND

Inspector's Name:

Arrival Port:

Arrival Date:

Vessel's Name:

BALLAST WATER

☐ YES ☐ NO If NO go to question 5

List Each Tank Number and Type (see codes below):

1 Are you carrying ballast water?

2 List any tanks loaded with ballast water in Port Phillip Bay, Victoria or Tasmania.

3 How will you comply with NZ's ballast water controls. (See NZ Import Health Standard for Ballast Water from all Countries.) Check the box indicating how you will comply (A, B or C) below.

A. Not discharging any ballast water in New Zealand waters. ☐ Flow-through ☐ or ☐ Empty/refill ☐

B. Exchanging the ballast water mid-ocean in all tanks that are to be discharged in New Zealand waters. Indicate whether flow-through or empty/refill technique was used. Note: Flow-through requires 3 times the tank capacity to be pumped through the tank. ☐

C. Discharging only fresh water. State when and where the water was loaded. ☐

4 If you cannot comply, check the box (A &/or B) indicating the reason(s). Give details. ☐

A. Vessel is not physically capable of either empty/refill or flow-through exchange. Specify Details: ☐

B. Exchange would have caused unacceptable risk to crew or vessel due to weather conditions. Specify Details: ☐

CLEANING: SEDIMENTS ☐ YES ☐ NO Date: ☐ YES ☐ NO Port or Position:

Do you intend to discharge sediment or other debris from ballast tanks/holds (excluding normal deballasting), anchors, chains or chain lockers in New Zealand waters? If YES, state when and where. ☐ YES ☐ NO Date: ☐ YES ☐ NO Port or Position:

Please note that sediments must be discharged into an approved landfill. ☐ YES ☐ NO Date: ☐ YES ☐ NO Port or Position:

CLEANING: HULL FOULING ☐ YES ☐ NO Date: ☐ YES ☐ NO Port or Position:

6 When and where was the vessel last dry-docked and cleaned? ☐ YES ☐ NO Date: Started: ☐ YES ☐ NO Date: Finished: ☐ YES ☐ NO Port or Position:

7 Has the vessel been laid-up for 3 months or more since it was last dry-docked and cleaned? ☐ YES ☐ NO Date: ☐ YES ☐ NO Port or Position:

8 Do you intend to clean the hull of the vessel in New Zealand? If YES, state when and where. ☐ YES ☐ NO Date: ☐ YES ☐ NO Port or Position:

Ballast tank codes: Upper=U, Lower=L, Forepeak=FP, Aftpeak=AP, Double Bottom=DB, Deep Tank=DT, Wing Tank=WT, Topside=TS, Cargo Hold=CH, Other (specify), Port=P, Starboard=S. (eg 3UWTP).

MASTER'S NAME AND SIGNATURE: ☐ Discharge of ballast denied ☐ Discharge of ballast granted (This voyage only)

MAF's directions to vessel:- ☐ Discharge of ballast permitted (Contact MAF if intentions change)

INSPECTOR'S SIGNATURE: ☐ Discharge of ballast denied ☐ Discharge of ballast granted (This voyage only)

New Zealand Ministry of Fisheries. Pursuant to section 22 of the Biosecurity Act 1993. Revised April 2004

DECLARATION: PART 2

TO BE COMPLETED FOR ALL VESSELS ENTERING NEW ZEALAND WATERS									
1. VESSEL INFORMATION									
Flag:	Vessel's Name:			IMO Number:		Vessel's Call Sign:			
	Vessel's Owner:			Vessel's Agent:		Gross Tonnage (MT):			
Type of Vessel:	<input type="checkbox"/> Bulk	<input type="checkbox"/> Container	<input type="checkbox"/> Tanker	<input type="checkbox"/> RORO/Cars	<input type="checkbox"/> Fishing	Other (specify)		Ballast pumping capacity:	
	Total Ballast Capacity (specify units):					Ballast pumping capacity:			
Total Number of Ballast Tanks On Board Vessel:									
Date of Arrival in New Zealand:									
Date of Departure from New Zealand:									
2. THIS VOYAGE									
Total Ballast Volume on Arrival in NZ (specify units; m ³ , MT):									
CONTINUATION OF ANOTHER FORM									

TICK NUMBER FOR	Total Number of Tanks in Ballast on Arrival in NEW ZEALAND
	Total Number of Tanks in Ballast on Arrival in NEW ZEALAND (if none, on to bottom of page)

3. BALLAST WATER DROG: ... other than New Zealand.

IMPORTANT: **UNCLASSIFIED SOURCE(S)** for ballast taken on in countries other than the U.S. must be listed. Detail each ballast management operation to tanker notes. **ESTIMATED SOURCE(S)** for ballast taken on in countries other than the U.S. must be listed. Detail each ballast management operation to tanker notes. **DISCHARGED**

List the original BALLAST WATER SOCKET(s) _____

List the original BALLAST WATER EXCHANGE MASTER LIST NO. _____

List the original BALLAST WATER EXCHANGED MASTER LIST NO. _____

ALL TANKS DISCHARGED IN NEW ZEALAND THAT CONTAINED ANY BALLAST WATER LAST YEAR MUST REPORT TO THE PORT AUTHORITY AT COMMENCEMENT

TANK	NO. and	DATE	TIME	TYPE	REMARKS	VOLUME	PERCENTAGE

[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]

Wing Tank=WT, Topside=TS, Cargo Hold=CH, Other (specify), Port-F, Starboard-F, Port-A, Starboard-A

Ballast tank codes: Upper=U, Lower=L, Forepeak=FP, Aftpeak=AP, Double bottom=2b, 3b, 4b, 5b, 6b, 7b, 8b, 9b, 10b, 11b, 12b, 13b, 14b, 15b, 16b, 17b, 18b, 19b, 20b, 21b, 22b, 23b, 24b, 25b, 26b, 27b, 28b, 29b, 30b, 31b, 32b, 33b, 34b, 35b, 36b, 37b, 38b, 39b, 40b, 41b, 42b, 43b, 44b, 45b, 46b, 47b, 48b, 49b, 50b, 51b, 52b, 53b, 54b, 55b, 56b, 57b, 58b, 59b, 60b, 61b, 62b, 63b, 64b, 65b, 66b, 67b, 68b, 69b, 70b, 71b, 72b, 73b, 74b, 75b, 76b, 77b, 78b, 79b, 80b, 81b, 82b, 83b, 84b, 85b, 86b, 87b, 88b, 89b, 90b, 91b, 92b, 93b, 94b, 95b, 96b, 97b, 98b, 99b, 100b, 101b, 102b, 103b, 104b, 105b, 106b, 107b, 108b, 109b, 110b, 111b, 112b, 113b, 114b, 115b, 116b, 117b, 118b, 119b, 120b, 121b, 122b, 123b, 124b, 125b, 126b, 127b, 128b, 129b, 130b, 131b, 132b, 133b, 134b, 135b, 136b, 137b, 138b, 139b, 140b, 141b, 142b, 143b, 144b, 145b, 146b, 147b, 148b, 149b, 150b, 151b, 152b, 153b, 154b, 155b, 156b, 157b, 158b, 159b, 160b, 161b, 162b, 163b, 164b, 165b, 166b, 167b, 168b, 169b, 170b, 171b, 172b, 173b, 174b, 175b, 176b, 177b, 178b, 179b, 180b, 181b, 182b, 183b, 184b, 185b, 186b, 187b, 188b, 189b, 190b, 191b, 192b, 193b, 194b, 195b, 196b, 197b, 198b, 199b, 200b, 201b, 202b, 203b, 204b, 205b, 206b, 207b, 208b, 209b, 210b, 211b, 212b, 213b, 214b, 215b, 216b, 217b, 218b, 219b, 220b, 221b, 222b, 223b, 224b, 225b, 226b, 227b, 228b, 229b, 230b, 231b, 232b, 233b, 234b, 235b, 236b, 237b, 238b, 239b, 240b, 241b, 242b, 243b, 244b, 245b, 246b, 247b, 248b, 249b, 250b, 251b, 252b, 253b, 254b, 255b, 256b, 257b, 258b, 259b, 260b, 261b, 262b, 263b, 264b, 265b, 266b, 267b, 268b, 269b, 270b, 271b, 272b, 273b, 274b, 275b, 276b, 277b, 278b, 279b, 280b, 281b, 282b, 283b, 284b, 285b, 286b, 287b, 288b, 289b, 290b, 291b, 292b, 293b, 294b, 295b, 296b, 297b, 298b, 299b, 300b, 301b, 302b, 303b, 304b, 305b, 306b, 307b, 308b, 309b, 310b, 311b, 312b, 313b, 314b, 315b, 316b, 317b, 318b, 319b, 320b, 321b, 322b, 323b, 324b, 325b, 326b, 327b, 328b, 329b, 330b, 331b, 332b, 333b, 334b, 335b, 336b, 337b, 338b, 339b, 340b, 341b, 342b, 343b, 344b, 345b, 346b, 347b, 348b, 349b, 350b, 351b, 352b, 353b, 354b, 355b, 356b, 357b, 358b, 359b, 360b, 361b, 362b, 363b, 364b, 365b, 366b, 367b, 368b, 369b, 370b, 371b, 372b, 373b, 374b, 375b, 376b, 377b, 378b, 379b, 380b, 381b, 382b, 383b, 384b, 385b, 386b, 387b, 388b, 389b, 390b, 391b, 392b, 393b, 394b, 395b, 396b, 397b, 398b, 399b, 400b, 401b, 402b, 403b, 404b, 405b, 406b, 407b, 408b, 409b, 410b, 411b, 412b, 413b, 414b, 415b, 416b, 417b, 418b, 419b, 420b, 421b, 422b, 423b, 424b, 425b, 426b, 427b, 428b, 429b, 430b, 431b, 432b, 433b, 434b, 435b, 436b, 437b, 438b, 439b, 440b, 441b, 442b, 443b, 444b, 445b, 446b, 447b, 448b, 449b, 450b, 451b, 452b, 453b, 454b, 455b, 456b, 457b, 458b, 459b, 460b, 461b, 462b, 463b, 464b, 465b, 466b, 467b, 468b, 469b, 470b, 471b, 472b, 473b, 474b, 475b, 476b, 477b, 478b, 479b, 480b, 481b, 482b, 483b, 484b, 485b, 486b, 487b, 488b, 489b, 490b, 491b, 492b, 493b, 494b, 495b, 496b, 497b, 498b, 499b, 500b, 501b, 502b, 503b, 504b, 505b, 506b, 507b, 508b, 509b, 510b, 511b, 512b, 513b, 514b, 515b, 516b, 517b, 518b, 519b, 520b, 521b, 522b, 523b, 524b, 525b, 526b, 527b, 528b, 529b, 530b, 531b, 532b, 533b, 534b, 535b, 536b, 537b, 538b, 539b, 540b, 541b, 542b, 543b, 544b, 545b, 546b, 547b, 548b, 549b, 550b, 551b, 552b, 553b, 554b, 555b, 556b, 557b, 558b, 559b, 560b, 561b, 562b, 563b, 564b, 565b, 566b, 567b, 568b, 569b, 570b, 571b, 572b, 573b, 574b, 575b, 576b, 577b, 578b, 579b, 580b, 581b, 582b, 583b, 584b, 585b, 586b, 587b, 588b, 589b, 590b, 591b, 592b, 593b, 594b, 595b, 596b, 597b, 598b, 599b, 600b, 601b, 602b, 603b, 604b, 605b, 606b, 607b, 608b, 609b, 610b, 611b, 612b, 613b, 614b, 615b, 616b, 617b, 618b, 619b, 620b, 621b, 622b, 623b, 624b, 625b, 626b, 627b, 628b, 629b, 630b, 631b, 632b, 633b, 634b, 635b, 636b, 637b, 638b, 639b, 640b, 641b, 642b, 643b, 644b, 645b, 646b, 647b, 648b, 649b, 650b, 651b, 652b, 653b, 654b, 655b, 656b, 657b, 658b, 659b, 660b, 661b, 662b, 663b, 664b, 665b, 666b, 667b, 668b, 669b, 670b, 671b, 672b, 673b, 674b, 675b, 676b, 677b, 678b, 679b, 680b, 681b, 682b, 683b, 684b, 685b, 686b, 687b, 688b, 689b, 690b, 691b, 692b, 693b, 694b, 695b, 696b, 697b

MASTER'S NAME AND SIGNATURE: _____

New Zealand Ministry of Fisheries. Pursuant to section 22 of the Biosecurity Act 1993. Revised April 2004

NOTED: 10/10/10

5) B R A Z I L

NATIONAL REQUIREMENT

Country: **BRAZIL**

Ports affected: All (See separate requirement for Amazon River / Para River)

Ships affected: All ships that carried out ballast water discharge in Brazilian jurisdiction waters

All ships engaged in commercial navigation between distinct hydrographical basins and between maritime and fluvial ports.

Exemptions:

1. Any war ship, Navy auxiliary ship or any other ship owned by a State or by it operated and used, temporarily, solely in official non-commercial service;
2. Ships with sealed tanks containing permanent Ballast Water not subject to discharge to the aquatic environment;
3. Port and supply boats;
4. Ships that due to their design characteristics do not permit ballast changes, subject to prior request, made by the owner to the Ports and Coasts Directorate (DPC), including corresponding arguments;
5. Boats of sport and recreation used only for completion and recreation or those used for rescue and salvage, whose total length do not exceed 50 meters and with maximum Ballast water capacity of eight cubic metres

Implementation: Mandatory application

Date of start: 15 October 2005

Methods acceptable: The three methods for ballast water exchange – Sequential, flow-through and dilution will be accepted. When the flow-through or dilution method is used, at least three times the tank's volume should be pumped. Ballast water exchange should be carried out with an efficiency of at least 95% volumetric exchange.

Unwanted aquatic organisms or pathogens: Not defined

Uptake control measures: The ship must arrange at least 200 miles away from the nearest land and in waters at least 200 metres deep.

Sampling required: Not defined

Records required: Ship master or its agent must send a ballast water report form (NORMAN 20) to the harbour master or its agent 24hour prior to arrival in port. A copy of this report is to be retained on board for possible presentation to any other authorities.

Procedures if en route management is not possible: The change must be carried out as far as possible from the nearest land, in all cases, at least 50 nautical miles away and in waters at least 200meters deep.

Procedure if ballast water found to be unacceptable after sampling: Not applicable

For further information refer to: More detailed information about these provisions can be obtained from secom@dpc.mar.mil.br

Amazon River

Ships bound for sailing Amazon River, coming from international navigation or from distinct fluvial basin, must carry out two ballast water change. The first to avoid transferring exotic and/or pathogenic organisms, to be carried out as described in case of international navigation, and in case of cabotage the change can be of, at least, once the volume of the tank, even when the ship uses the continues flow or the Brazilian dilution method. The second change, to reduce the salinity of the ballast water, must be carried out in the segment between the 20meter isobathic and Macapa. In case of ships with Ballast volume smaller than or equal to 5,000 M the limit will be the Jari River estuary. In this second change, it will be necessary to pump only once the volume of the tank, both to cabotage and international navigation.

Para River

The procedure of the Para River must be identical to the one for the Amazon River: the ships carried out the two change , the first in case of international navigation, and in case of cabotage the change can be of at least once the tank volume. The second change must occur away at least sixty miles from Salinopolis up to the Ponta do Chapéu Virado beacon (Mosqueiro Island), pumping out only once the tank volume.

Attachments

- Maritime Authority Regulation for Ship's Ballast Water Management

BALLAST WATER REPORTING FORM - HARBOR MASTER

2. BALLAST WATER

[illegible]

IF EXCHANGES WERE NOT CONDUCTED, STATE OTHER CONTROL ACTION(S) TAKE:

IF NONE STATE REASON WHY NOT:

ANNEX 5: INTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS, 2004 ON BOARD? YES NO

IMO BALLAST WATER GUIDELINES ON BOARD (RES. A.868(20))? YES NO

RESPONSIBLE OFFICER'S NAME AND TITLE (PRINTED) AND SIGNATURE:

***Fulfil with Port's name, preferably**

**MARITIME AUTHORITY REGULATION FOR SHIP'S BALLAST
WATER MANAGEMENT**

**BRAZILIAN NAVY
PORTS AND COASTS DIRECTORATE
2005**

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ALTERATIONS RECORD FORM

ALTERATION NUMBER	DOCUMENT THAT DETERMINED THE ALTERATION AND RESPECTIVE DATE	AFFECTED PAGES	ALTERATION DATE	SIGN

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INTRODUCTION

1- History

The introduction of exotic aquatic organisms and pathogenic agents from various regions of the world in habitats outside their native limits, with potential to threaten the environment and the economies, has been a factor of great concern to the authorities of many countries.

Historically, it is unknown when this process, that can be called bio-invasion, started. However, one knows that, with the technological progress of the marine transportation, the ships became bigger, faster and begin to be used with higher frequency, allowing, therefore, for reducing trips transit time and intensifying commercial practices. As a consequence, these means of transportation have been appointed as the main vectors for the dissemination of these organisms, mainly, via incrustation in the hull of ships and platforms, as well as through the Ballast Water and its sediments, object of the present Regulation.

Researchers appoint as adverse consequences of the introduction of these invaders in the aquatic environment the loss of the local or regional biodiversity, the modification of the waterscapes, various economic prejudices, besides the proliferation of pathologic micro-organisms, as the one which causes the cholera, among others. Concrete situations, as the one described here below, evidence that the transfer of organisms, transported by the Ballast Water, determine the necessity of urgent measures.

The mussel zebra, *Dreissena polymorpha*, born in Europe, that has established itself in the Great Lakes, USA, and today occupies 40% of the North-American rivers, is causing losses of millions of dollars per year for incrustation removal and control (Gauthier & Stell, 1996).

In Brazil, the presence of exotic specimens had been noticed every now and then along the coast. However, as the golden mussel (*Limnoperna fortunei*) has come to scene, there was a drastic change in the way the problem was treated in the country. This fresh water mollusk, coming from the Asian South-East, was introduced in Argentina, through ballast water, in 1991. In 1998, its presence was noted in the estuary of the Jacuí River, close to Porto Alegre. Today, its occurrence is found, in great proportions, in the rivers Guaíba, Paraguai and Paraná. The presence of the golden mussel, due to its great adaptation and reproduction capacity, has been causing losses in view of concentration in intakes and discharges of pipelines and their consequent blockage; the deterioration and premature obstruction of filters and gratings due to the enormous quantity of incrustations generated. Besides, when their death occurs, the mussel brings problems to the water treatment stations, in view of the great quantity of individuals to

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be disposed off and the bad smell, increasing the costs of their maintenance, in view of the necessity of cleaning and filter changing at a higher frequency.

The matter involves, in principle, two basic points: the risk to the health and the pollution of the aquatic environment caused by ships and platforms, when use Ballast Water for consecution of their objectives and needs. In face of that, the Maritime Authority (MA) and the Sanitary and Environment Authorities, with regard to their specific competences as instituted in law, have worked in order to present possible solutions to mitigate the damages caused to the environment due to impounding, discharging and replacing Ballast Water in places considered improper or non authorized. For instance, one can cite the Ballast Water Management, the control and the monitoring of the de-ballasting, and mainly the establishment, by the MA, of the Regulation to take care of the theme.

2- PURPOSE

To establish requisites referring to the pollution prevention from ships in Brazilian Jurisdictional Waters (BJW), with regard to the Ballast Water Management.

The initial system will have as fundamental basis the change of the ballast water according to the International Maritime Organization (IMO) Assembly Resolution A.868(20), of 1997 and the International Convention for Ship's Ballast Water and Sediments Control and Management, adopted in February, 2004 and signed by Brazil in January 25th, 2005, and will be applied to all ships that may discharge Ballast Water in the BJW. The exemptions and exceptions will be dealt with in specific items.

As soon as more advanced methods for the Ballast Water treatment are developed, this Regulation will be adapted to attend the new situations.

3- CONSIDERATIONS ON THE BALLAST WATER MANAGEMENT

- a) It is fundamental that the Ballast Water Management procedures are efficient and viable, technical and ecologically, and that they are implemented aiming at reducing the costs and the delay imposed to the ships to a minimum, obeying this Regulation;
- b) The implementation of methods and procedures for the Ballast Water Management shows itself as a solution to mitigate the introduction of exotic aquatic organisms and pathogenic agents in the BJW;
- c) The Ballast Water Management used for compliance with this Regulation must be safe to the ship, its equipment, crew and passengers; and not to cause more or greater environment impact than its absence;

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- d) There is an evident necessity of Ballast Water Management and equipment new technologies development, once the operational measures like the renewal of the Ballast Water in the ocean are not fully satisfactory. New methods of Ballast Water Management will be able to be accepted as alternatives, provided they guaranty, at least, the same level of protection to the environment, the human health, the property and the natural resources, and are approved by the Maritime Environment Protection Committee (MEPC), of the IMO; and
- e) Environmental and sanitary information of seasonal and local character must be part of the Ballast Water Management Plan of the ports, where information on the areas of ballast impounding can be obtained.

4- CORRELATED LEGISLATION**4.1 - Law no 6,938/1981 (Environment National Policy)**

The Law no 6,938/1981 has defined pollution, in a comprehensive way, aiming at protecting not only the environment, but also the society, the health and the economy. Therefore, the mentioned Law has defined in his article 3o, incise III, the pollution as: *"(...) pollution: the degradation of the environment quality resulting from activities that directly or indirectly;*

- a) harm the health, safety and the well-being of the population*
- b) create adverse conditions to the social and economic activities*
- c) affect unfavorably the biota*
- d) affect the esthetic and sanitary conditions of the environment*
- e) launch materials or energy in conflict with the established environment standards."*

4.2 - Law no 9,537/1997 (LESTA)

The Aquatic Traffic Safety Law (LESTA) has established various attributions to the MA, being, therefore, the basis for the preparation of this NORMAN. Thus, the LESTA prescribes that the MA will have to establish the preventive/normative requisites, in order to avoid comprehensively the marine pollution and, consequently, any damage that can be caused by Ballast Water, as described in art. 4o, incise VII, of the referred Law: "Art.4o The attributions of the Maritime Authority are: (...) VII – to establish requisites referring to the conditions of safety and habitability and for pollution prevention from ships, platforms or their supporting facilities."

4.3 - Law no 9,605/1998 (Environment Crimes Law)

The Law no 9,605/1998, that deals with environmental crimes as well as with environment administrative penalties, has defined in art. 70, comprehensively, the administrative environment penalty, and has establish that the non compliance with the environment

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prevention regulations constitutes motive for penalties application. The Decree no 3,179/1999, that has regulated the referred Law, besides defining what's environment infraction, has granted the competent organ (Maritime Authority), in art. 61, the possibility of issuing normative administrative acts, aiming at discipline the necessary procedures for the correct application of administrative penalties. So, based in art. 61 of the above mentioned Decree combined with art.70 of the Law no 9,605/1998, here below transcribed, the rules that discipline the penalties for non compliance with the preventive requisites collimated in this NORMAN were elaborated. *"Art. 70: one consider environment administrative infraction every act or omission that violates juridical rules for use, enjoyment, promotion, protection, and recovery of the environment.*

§ 1º Are competent authorities to draw up environment infraction notice and to institute administrative proceedings the servants of the environment organs integrating the Environment National system – SISNAMA, designated for activity of inspection, as well as the Port Captainty agents, of the Navy Ministry.

4.4 - Resolution RDC n° 217 dated November 21st, 2001

Finally, The National Agency of Sanitary Vigilance (ANVISA) has published the Resolution RDC n° 217, dated November 2001, that approves the Technical Regulation for the sanitary vigilance of the national territory ports, of ships that transport cargo and passengers. In art. 6º and 19, the Regulation requires that the ship, when requesting free pratique, delivers to the Sanitary Authority the Ballast Water Reporting Form duly filled. In the Resolution there is still provision on the possibility of sampling for identification of the presence of harmful and pathogenic agents, physical indicators and chemical components in the Ballast Water, to the discretion of the Sanitary Authority (art. 28).

5- DEFINITIONS

For the purpose of this Regulation the following definitions will be used:

MARITIME AUTHORITY AGENT – Ports and Coasts Directorate, Capitancies, Delegacy Agents, and Brazilian Navy Agencies;

BALLAST WATER – It is the water with its suspended particles admitted on board a ship in her ballast tanks, for controlling the trim, list, draft, stability or tensions in the ship; *BRAZILIAN*

JURISDICTIONAL WATERS (BJW) – It is considered waters under national jurisdiction: I – the interior waters: a) those found between the coast and a straight base line, from where the territorial sea is measured) those of the ports; c) those of the bays; d) those of

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the rivers and their estuaries; e) those of the lakes, lagoons and channels; f) those of the archipelagos; g) the waters between the shoals and the coast; II – marine waters, all those under national jurisdiction that are not interior ones;

ECOLOGICALLY SENSIBLE AREAS – Interior and marine water regions, defined by a Public Authority act, where the pollution prevention, control and the ecological equilibrium require special measures for protection and preservation of the environment, with regard to ship's traffic;

GROSS TONNAGE – Non dimensional parameter determined in accordance with the International Convention on Ships Tonnage, 1969, which represents the total volume occupied by all enclosed spaces of the ship;

COMPETENTE AUTHORITY – Marine Authority Agent;

MARINE AUTHORITY (MA) – Authority exerted directly by the Navy Commander, responsible for the safeguard of the human life and navigation at open sea and interior waters, as well as for the environmental prevention of the pollution caused by ships, platforms and their supporting facilities;

PORT AUTHORITY – Authority responsible for the administration of the organized port, being his duty to inspect the port operations and to zeal in order that the services are carried out with regularity, efficiency, safety and respect to the environment;

SANITARY AUTHORITY - Authority that has directly under his responsibility, within his territorial jurisdiction, the application of the appropriate sanitary measures according to the Law and Regulations in force in the national territory as well as treaties and other international acts of which Brazil is signatory;

CABOTAGE – Merchant navigation conducted in coastal waters of a sole country or in limited maritime waters;

COMPANY – The owner of the ship or any other organization or person, such as operator, bare boat charterer that took from the owner the responsibility of operating the ship and that, on assuming such responsibility, has agreed in accepting all the obligations and responsibilities imposed by the International Code of Safe Management;

DEBALLASTING – Discharge of ballast water, used on board the ship's ballast tanks/holds, to the aquatic environment or receiving facilities;

BALLAST WATER MANAGEMENT – It comprises the mechanical, physical, chemical and biological processes, either individually or combined, for removing, turn harmless or avoid the admission or discharge of aquatic harmful organisms and pathogenic agents found in Ballast

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Water and sediments, when applied. Includes both the Ballast Water change in ocean waters and the water treatment;

NAVAL INSPECTION – Activity of administrative character that consists in inspection for compliance with LESTA, regulations and rules from it derived, and international acts and resolutions ratified by Brazil, in respect exclusively to the safeguard of life at sea and navigation, in open sea and interior waters, as well as the prevention of marine pollution by ships, fixed platforms and their supporting facilities;

PORT FACILITY OR TERMINAL – Facility explored by public or private right corporate entity, inside or outside the organized port, used in moving and storing cargo destined to or coming from transportation via waterways;

NATIONAL CABOTAGE NAVIGATION – That carried out exclusively in Brazilian Jurisdictional Waters (BJW);

SHIP – It means a vessel of any type operating in the aquatic environment, inclusive submersibles, floating apparatus, floating platforms, stationary units for storage and offloading (FSO) and production, storage and offloading stationary units (FPSO);

EXOTIC, HARMFULL AQUATIC ORGANISMS AND PATHOGENIC AGENTS – These are aquatic or pathogenic organisms that, if introduced in the sea, including estuaries, fresh water courses, may cause harm to the environment, to the public health, properties or resources, damage the biological diversity or interfere in other legitimate uses of such areas;

ENVIRONMENT ORGAN – Organ for environment protection and control of the federal, state and municipal executive branches, integrating the Environment National System – SISNAMA;

POLLUTION – Environment quality degradation resulting from activities that direct or indirectly harm the health, safety and well-being of the population, create adverse conditions to social and economical activities, affect unfavorably the biota, affect the environment esthetic or sanitary conditions and launch material or energy in non compliance with established international standards;

ORGANIZED PORT – Port instituted and equipped to attend the needs of navigation and moving and storing of goods, conceded or explored by the Union, whose traffic and port operations are under the jurisdiction of a Port Authority;

SHIP'S PROCEDENCE – Last port or call point of the ship before her arrival to the first port or call point subject to a Naval Inspection; and

PRESERVATION UNIT – territorial space and its environmental resources, including jurisdictional waters, with relevant natural characteristics, legally instituted by the Public

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Authorities, aiming at preserving and defining limits, under special administration regimen, to which adequate protection guaranties are applied.

6- REFERENCES

- MARTINS, Ilidia da A. G. Juras, Problems Caused by Ballast Water. Deputy ... – Legislative Consultation, 2003. Access: 07/29/2004, www.camara.gov.br/internet/diretoria/conleg/estudos/211161pdf.
- MEDAUAR, Environmental Legislation Collection. 2° ed. São Paulo: Revista dos Tribunais, 2003.
- SILVA, J.V.S. and Souza, R.C.C.L. Ballast Water and Bio-invasion. Rio de Janeiro: Interciência, 2004
- SILVA DE MORAIS, Luis Carlos. Environment Right Curse. São Paulo: Atlas, 2001 BRASIL. Sanitary Vigilance National Agency Access in 08/02 04 site: <http://e-legis.bvs.br/leisref/public/showAct.php?id=1196>
- Law n° 9,605, dated February 12th, 1998.
- Law n° 9,537, dated December 11th, 1997.
- Law n° 6,938, dated August 31st, 1981.
- Decree n° 3,179, dated September 21st, 1999, regulating Law n° 9,605/1998
- Resolution – RDC – ANVISA n° 217, dated November 21st, 2001
- Comment n° 37/2004, dated May 4th, 2004, of the Ports and Coasts Directorate.
- International Maritime Organization (IMO). International Convention on Control and Management of Ship's Ballast Water and Sediments, 2004. London, 2004.
- International Maritime Organization (IMO). Guidelines for the Control and Management of Ship's Ballast Water, to Mitigate the Transfer of Harmful Aquatic Organisms and Pathogenic Agents – Resolution A.868(20). London, 1998.

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CHAPTER 1**APPLICATION, EXCEPTIONS AND EXEMPTIONS****1.1- APPLICATION**

The present regulation applies to all ships, national or international, equipped with ballast water tanks/holds, that utilizes the Brazilian ports and terminals. It is essential that the procedures for Ballast Water Management and sediments in it contained are efficient and, at the same time, environmentally safe, viable, that generate neither unnecessary costs and delays to the ship and its cargo nor imply in risk to its safety, its crew and to the navigation. All possible efforts must be endeavored to avoid that a ship is unduly retained or delayed."

1.2- EXCEPTIONS

Exceptions are emergency or particular situations that dispense the application of the general guidelines (incise 2.3.3) established in this Regulation. All emergency situations must be immediately informed to the MA Agent. The following situations are considered exceptions:

- a) cases of force majeure or emergency, to safeguard the safety of human life or the ship;
- b) when it is made necessary the admission or discharge of the Ballast Water and its contained sediments to guaranty the safety of a ship and the persons on board in emergency situations or saving of human life at sea;
- c) in case of Ballast Water and its sediments accidental discharge resulting from damage to the ship or her equipment, provided that all reasonable precautions had been taken, before and after the occurrence or the disclosure of the damage or discharge, as to prevent or minimize the discharge, unless the shipowner, company, ship operator or responsible officer negligibly had caused the damage;
- d) when the Ballast water and its sediments is taken in order to avoid or mitigate pollution incidents caused by the ship; and
- e) when the Ballast water and its sediments discharge is made on the same local where the totality of that Ballast Water and its sediments where taken, provided no mixture with Ballast Water and sediments from other areas had occurred.

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1.3- EXEMPTIONS

All ships exempt from complying with this Regulation must operate doing their utmost to avoid any contamination of the environment by discharging Ballast Water and its sediments. The following ships are exempt:

- a) any war ship, Navy auxiliary ship or any other ship owned by a State or by it operated and used, temporarily, solely in official non-commercial service;
- b) ships with sealed tanks containing permanent Ballast Water not subject to discharge to the aquatic environment;
- c) Port and supply boats;
- d) Ships that due to their design characteristics do not permit ballast change, subject to prior request, made by the owner to the Ports and Coasts Directorate (DPC), including corresponding arguments;
- e) Boats of sport and recreation used only for competition and recreation or those used for rescue and salvage, whose total length do not exceed 50 meters and with maximum Ballast Water capacity of eight cubic meters.

CHAPTER 2**INFORMATION, PROCEDURES AND BALLAST WATER MANAGEMENT****2.1- Information publishing**

The present Regulation must be amply divulged by the MA, through its Agents and by the Navigation Agents, to the Shipping Companies, Syndicates related to the marine area and any other organs involved in ship operation.

2.2.1- Implementation

Every national or foreign ship that utilizes water as ballast must have a Ballast Water Management Plan aiming at supply safe and efficient procedures for this purpose. This plan must be included in the operational documentation of the ship, besides being specific for each ship and containing the following items: a) detailed safety procedures for the ship and her crew associated with the Ballast Water Management; b) detailed description of the actions to be taken to implement the Ballast Water Management; c) to indicate the points where it is possible to collect the Ballast Water samples representative of the ballast the ship carries; d) officer on board responsible to assure that the Plan is correctly implemented; and e) to be written in the idiom the ship works with; if the idiom is not English, French or Spanish, a translation to one of these must be included.

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2.2.2- Documentation

The documentation referring to the Ballast Water Management Plan of the Brazilian ships and chartered by Brazil must be approved by Classification Society accredited by DPC.

2.3- BALLAST WATER MANAGEMENT**2.3.1- Inspection**

The ships that call at Brazilian ports or terminals are subject to Naval Inspection aiming at determine whether the ship is in conformity with this Regulation.

2.3.2- Remittance of the Ballast Water Reporting Form The Reporting Form on Ballast Water (Annex A/Annex B), duly filled, must be sent to the Captaincies (CP), Delegacies (DL) or Agencies (AG) by the captains of the ships or his agents, with minimum antecedence of 24 hours from the time estimated for ship's arrival. Further, the ship must have on board, for a period of

at least two years, a copy of this form to attend the Naval Inspection, as per art. 4.2 of this Regulation. For ships entering the Amazon basin, a copy of the form is also to be sent to the Santana Port Captaincy Delegacy, independently of their destination in that region. The CP/DL/AG, on their turn, must resend the forms, with monthly periodicity to the Admiral Paulo Moreira Studies Institute (IEAPM).

2.3.3- General guidelines for ship's Ballast Water change

Upon changing the Ballast Water, one should keep in mind the safety aspects of the crew and the ship and do it within favorable meteorological conditions. The following measures must be taken:

- a) the ships must arrange the Ballast Water change at least 200 miles away from the nearest land and in waters at least 200 meters deep, considering the procedures determined by this Regulation. It will be accepted the change of Ballast Water by any of the methods: Sequential, Continuous Flow and Dilution, as described in Annex C;
- b) in the cases that the ship cannot make the Ballast Water change in conformity with item a, the change must be carried out as far as possible from the nearest land and, in all cases, at least 50 nautical miles away and in waters at least 200 meters deep;
- c) it should not be required that a ship deviate from its voyage plan or delay the trip to comply with the dispositions in previous items. In this case, the ship shall present her vindication in accordance with Chapter 1 of this Regulation disposition;

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- d) it should not be required from a ship that is making the Ballast Water change that she complies with items a and b, if the Captain decides in a reasonable way that such change would threaten the safety or stability of the ship, her crew or passengers due to adverse meteorological conditions, excessive loads to the ship, failure in equipment or any extraordinary condition;
- e) when the ship utilizes the method of Continuous Flow or Dilution for changing the Ballast Water, she must pump, at least, three times the volume of the tank;
- f) upon making the Ballast Water change the ships must do it with an efficiency of at least 95% of the volumetric Ballast Water change;
- g) only the tanks/holds that had their water changed will be allowed to de-ballast;
- h) ships that do not make the de-ballast must, the same way, present the Reporting Form on Ballast Water (Annex A/Annex B);
- i) The MA Agent must, whenever dispose of information supplied by the environment organs, of public health, or more, of universities or research institutions, communicate to the marine agencies with regard to areas of their jurisdiction, where the ships should not take Ballast Water due to known conditions (for instance, area or areas known for containing flowering events, infestations or population of harmful aquatic organisms or pathogenic agents). When possible, the MA Agent will inform the localization of any alternative area or areas for taking or discharging Ballast Water, as well as areas where dredging is being carried out. Such information, in the future, will be consolidated in a Ballast Water Management Plan of the ports; and
- j) It is prohibited to discharge Ballast Water in Ecologically Sensible Areas and in Preservation Units (UC) or in other preventive areas established by the environment and sanitary organs, in the BJW, when plotted in nautical chart.

2.3.4- Sediments

The Ballast Water sediments may only be discharged to the sea in the same conditions established for the Ballast Water change specified in items a and b, incise 2.3.3, or in facilities or reception services for these sediments when available in ports and terminals.

2.3.5- Specific guidelines for the case of platforms

- a) the drilling rigs or production platforms are subject to the procedures for Ballast Water change by the occasion of their arrival in Brazil coming from foreign port or international or foreign waters;

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- b) the floating production platforms are exempt from complying with the procedures of Ballast Water changing from the moment of their installation in the operation site and during the period they remain in the location; and
- c) the drilling rigs are exempt from complying with the procedures for Ballast Water changing when their move take place in territorial waters and in the Brazilian Exclusive Economic Zone (ZEE).

2.3.6- New techniques

Meanwhile new technologies and new systems of management and Ballast Water treatment are developed, to avoid, mitigate and control the transportation by Ballast Water of exotic or pathogenic aquatic organisms, provided they are evaluated and accepted by the MA, the DPC will establish, timely, the appropriate regulatory instructions.

CHAPTER 3

PARTICULAR SITUATIONS

3.1- IMPOSSIBILITY OF COMPLYING WITH THE GENERAL GUIDELINES FOR CHANGING THE BALLAST WATER

When, due to emergency situations, or in face of the region hidrography, the general guidelines prescribed in the incise 2.3.3, cannot be complied with, the rules described here below will be observed.

The particular rules, except those occurred in face of emergency situations, may be modified any time by the MA, provided they are supported by scientific evidences.

3.2- EMERGENCY SITUATIONS

The dispositions of this Regulation will not be applied when it is necessary to safeguard the human life or the ships, in cases of force majeure due to weather inclemencies or in any other case that constitutes danger to human life or a real threaten to the ships, if the Ballast Water discharge configures the sole means of avoid the threaten and if there is high probability that the damages caused by the de-ballasting turn to be smaller than those that would occur otherwise.

3.3- CABOTAGE

3.3.1- Ships coming from overseas

Ships coming from overseas that have the need to de-ballast in the BJW, must have the totality of its Ballast Water changed before arriving to the first Brazilian port or terminal.

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3.3.2- Transportation between fluvial ports.

All ship engaged in cabotage must change the tanks/holds Ballast Water they intend to discharge, when navigating between fluvial ports of different fluvial basins.

In order not to cause a saline impact when discharging sea water changed during the trip, in the port of destination, the ship will have to change once the tank volume again in the areas defined in article 3.4.

Consider, to the effects of this Regulation, the Amazon, Sudeste and Paraguai-Paraná fluvial basins and their fluvial ports. The list of the main national ports and their geographic coordinates is shown in Annex D, as well as an illustrative map of their space distribution, in Annex E.

3.4- TWO BALLAST WATER CHANGES**3.4.1- Amazon River**

Ships bound for sailing in the Amazon River, coming from international navigation or from distinct fluvial basin, must carry out two Ballast Water change. The first to avoid transferring exotic and/or pathogenic organisms, to be carried out as described in the general guidelines (incise 2.3.3) in case of international navigation, and in case of cabotage the change can be of, at least, once the volume of the tank, even when the ship uses the continuous flow or the Brazilian dilution method. The second change, to reduce the salinity of the Ballast Water, must be carried out in the segment between the 20 meter isobathic and Macapá. In case of ships with Ballast volume smaller than or equal to 5,000 m3 the limit will be the Jari River estuary. In this second change, it will be necessary to pump only once the volume of the tank, both to cabotage and international navigation.

3.4.2- Pará River

The procedure for the Pará River must be identical to the one for the Amazon River: the ships carry out the two changes, the first as described in incise 2.3.3 in case of international navigation, and in case of cabotage the change can be of at least once the tank volume. The second change must occur away at least sixty miles from Salinópolis up to the Ponta do Chapéu Virado beacon (Mosqueiro Island), pumping out only once the tank volume.

3.4.3- Reporting Form referring to the second change

The second change must be documented in a second reporting form, that must be sent to the Oriental Amazon Port Captancy, by the time of ship's arrival to the Amazon basin

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port/terminal. In addition, the ship has to keep one copy on board, for a period of at least two years, at the disposal of the Naval Inspection.

CHAPTER 4

INSPECTION

4.1- INSPECTION SYSTEM

The inspection system is an essential component in the Ballast Water Management control, and, therefore, must be based in the adopted management regimen, to be coherent with the international practice and to be capable of evaluating whether the requirements of the Port State were complied with and, if not, to ensure that appropriate measures or penalties are applied. In case of violation of this Regulation, denunciation, emergency situation, or when relevant circumstances so justify, the MA agents must take measures that ensure the ship will not discharge Ballast Water, until she can do it without putting in danger the environment, the public health, the properties or the resources.

4.2- CONTROL

4.2.1- Procedure

The ballast water control must be carried out starting from the verification of the Ballast Water Management Plan and the Ballast Water Reporting Form (Annex A/Annex B). The Ballast Water Record Book and the Ballast Water International Management Certificate, when existent, must be analyzed, respectively, with regard to the performed Ballast operation records and its expiring date. The following topics can be subjected to verification by the Naval Inspector:

- a) in the Ballast Water Management Plan, to verify the Ballast Water change adopted by the ship;
- b) to verify if the Ballast Water Reporting Form (Annex A/Annex B) was correctly fulfilled;
- c) to verify the validity of the Certificate, issued by the competent Flag state Authority, when existent, whose validity period cannot exceed five years;
- d) to audit the Ballast Water Record Book, when existent, and the ship's records that were made necessary for obtaining the accessory information (such as Log Book, Engine Log Book, Ship's Positioning Record Book, And Tank Sounding Record Book);
- e) to verify whether the Ballast Water was carried out complying with the procedures of this Regulation.

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- f) To collect samples of the Ballast Water for future evaluation, when found necessary, and always in conformity with what is determined in the art 4.1; and
- g) As a way to verify/confirm the information obtained on the Reporting Form (Annex A/Annex B), the Naval Inspector may take samples of the tanks/holds Ballast Water for, using a refractometer, check the salinity of the water.

4.2.2- Standardization

Both the Ballast Water Management International Certificate and the Ballast Water Register Book must follow the standard prescribed in the Ship's Ballast Water and Sediments Convention (Supplements I and II of the referred Convention).

4.3- INSTRUMENTS FOR PENALIZATION**4.3.1- Procedure**

It is forbidden any violation of the provisions of this Regulation inside the BJW, being established penalties according to the national laws. When this occur, the MA Agent must institute an administrative procedure in conformity with the legislation, being authorized to, in addition, take measures to warn, arrest or prohibit the ship to get into the port or terminal. To the discretion of the MA Agent, however, the ship can be allowed to leave the port or terminal aiming at discharging or changing the Ballast Water in accordance with the procedures prescribed by this Regulation.

4.3.2- Penalties and Sanctions

The fines applied by non compliance with the dispositions emanated in this Regulation will be determined in function of the seriousness of the infraction, coherent with the other penalties adopted in the international navigation and in accordance with the values established in the Decree n° 3,179, dated September 21st, 1999.

4.4- INFRACTION

It constitutes infraction every action or omission that violates the rules established in this NORMAN.

4.5- INFRACTION CONFIRMATION

The infraction and its perpetrator will be confirmed;

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- a) at the moment it occurs or during the inspection;
- b) afterwards, by means of inquiry;
- c) via administrative proceedings.

4.6- PERPETRATOR

Respond for the infractions prescribed by this Regulation;

- a) the shipowner, natural person or legal entity, or who legally represent him;
- b) the ship's charterer or operator, in case this is not operated by the owner; and
- c) the natural person or legal entity that legally represents the ship and/or the platform.

4.7- COMPETENCE

4.7.1- MA Agents

It's up to the MA Agents (Art. 70, § 1° of the Law 9,605/1998), designated as Competent Authorities, to draw up environment infraction notices and institute administrative proceedings.

4.7.2- Ports and Coasts Director

It is up to the DPC as REPRESENTATIVE OF THE MARINE AUTHORITY FOR THE ENVIRONMENT POLLUTION PREVENTION to judge, in last instance, the appeals on fines applied for violating Laws and Regulations

referring to the environment pollution prevention for undue discharge of Ballast Water in the BJW.

4.8- REGULATIONS AND SPECIFIC PROCEDURES FOR INSTITUTING ADMINISTRATIVE PROCEEDINGS

4.8.1- Administrative Proceedings

The administrative proceedings, prescribed in Art. 70 of the Law n° 9,605/1998 has as purpose the investigation of the facts that have come to the knowledge of the MA, for confirming possible infractions and their authors, as well as infractions verified in the act and during the inspections.

In the administrative proceedings, established in this Regulation, the opportunity for the parties to confront each other and the full defense are assured, with their inherent means and resources.

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4.8.2- Term for investigating the environmental infraction**a) Infraction Notice**

I – Drawn up the notice, the violator will have a 20 day time period to present his defense or refute the Infraction Notice, counting from the date the notice is acknowledged;

II – The judgment of the Infraction Notice must be rendered by the Competent Authority, with the decision duly substantiated, within 60 days, counting from the date the notice was acknowledged, presented or not the defense or refutation.

III – Considered the Notice valid, the penalty will be established and the violator notified; and

IV – The violator will have 5 days from receiving the notice to pay the fine.

The infraction notice must be signed by the violator, agent, or legal representative and by witnesses. In case the violator refuses to sign, a statement of fact will be issued by the Competent Authority, in the presence of two witnesses, in case he does not know signing, the notice will be taken at his request

b) Appeal to the last administrative instance

I – In case the defense is not judged justified and the violator disagree with the applied penalty, he may appeal to the decision, to the last administrative instance, through the Authority who rendered the decision, addressed to the Ports and Coasts Director (DPC), within 20 days counted from the date the MA Agent decision was notified. The DPC will have thirty days to render his decision, duly substantiated, from the date the appeal was received;

II – appeal of any nature must be delivered to the Authority whose act one appeals against, in order that he sends it, together with his considerations and arguments, to the addressee Authority; and

III – in case of appeal put against decision in administrative proceedings, referring to other legal instruments that not the Law n° 9,605/1998, the appealing instances and terms prescribed in the respective instruments are to be observed.

4.9- Penalties Application

a) The administrative infractions are punished with the sanction of a single fine;

b) If the violator incurs, simultaneously, in two or more infractions, the corresponding sanctions will be applied him cumulatively

c) The single fine will be applied to the violator: I – for irregularities that had being practiced; and II – when obstruction is caused to the MA Agents inspection

d) The fine will have as basis the aggrieved juridical object;

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- e) The fine value is the value established by the Decree n° 3,179/1999, being the minimum of R\$ 1,000,00 (one thousand reais), and the maximum of R\$ 50,000,00 (fifty thousand reais);
- f) The MA agent, upon drawing up the infraction notice, will indicate the fine applicable to the act, as well as, if pertinent, the remaining sanctions established by this Regulation, observing: I – the seriousness of the facts, in view of the infraction motives and its consequences to the public health and environment II – the antecedents of the violator, with regard to the compliance with the legislation of environment interest; and III – the economic situation of the violator.
- g) The competent authority upon analyzing the appeal may, on his own discretion or by request, independently of the applied fine, keep or reduce its value, respected the limits established in the incurred items, observing the previous dispositions, or, also, cancel the notice, if there is illegality or revoke it, following criteria of convenience and opportunity;
- h) The competent authority, upon analyzing the administrative proceedings of the Infraction Notice, will observe, where pertinent, what is disposed in art. 14 and 15 of the Law n° 9,605, dated February 12th, 1998; and
- i) It constitutes re-incidence the practice of an other environment infraction made by the same violator in the period of three years, classified as:
 - I – specific: making infraction of same nature; or
 - II – generic: making infraction of different nature. In case of specific or generic re-incidence, the fine to be imposed for practicing the new infraction will have its value augmented to three times and twice, respectively.

4.10- ENROLLMENT IN THE FEDERAL OVERDUE TAX LIABILITY

Failure in paying the applied fine will imply in enrolling the violator in the Federal Overdue Tax Liability.

(Translator note: the Brazilian Federal Overdue Tax Liability is a Registrar whose recorded natural persons or legal entities are liable to immediate execution action, most for tax debts, once it constitutes an extra-judicial execution title in terms of the Brazilian Civil Proceedings Code)

4.11- OMITTED CASES

Those cases that are omitted or not foreseen in this Regulation will be resolved by the MA Agent.

2. BALLAST WATER

1. SHIP INFORMATION

Vessel Name:	Type:	IMO Number:	Specify Units: M ³ , MT
Owner:	Gross Tonnage:	Call Sign:	Total Ballast Water on Board:
Flag:	Arrival Date:	Agent:	
Last Port and Country:		Arrival Port:	Total Ballast Water Capacity:
Next Port and Country:			

3. BALLAST WATER TANKS	Ballast Water Management Plan on Board?	YES	NO	Management Plan Implemented?	YES	NO

Total number of ballast tanks on board:

No. of tanks in ballast:

IF NONE IN BALLAST GO TO No. 5.

No. of tanks exchanged;	No. of tanks not exchanged;
1	1
2	2
3	3
4	4
5	5
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7	7
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100	100

4. BALLAST WATER HISTORY: RECORD ALL TANKS THAT WILL BE DEBALLASTED IN PORT STATE OF ARRIVAL; IF NONE GO TO No. 5.

Tanks/Holds (List multiple sources per tank separately)	BALLAST WATER SOURCE					BALLAST WATER EXCHANGE Dilution (1), Flow Through (2) or Empty/Refill (3)				BALLAST WATER DISCHARGE					
	DATE DDMMYY	PORT or LAT./ LONG. *	VOLUME (units)	TEMP (units)	SALINITY (units)	DATE DDMMYY	ENDPOINT LAT./ LONG.	VOLUME (units)	% Exch. (m)	Depth (m)	BW exchange method	DATE DDMMYY	PORT or LAT. /LONG. *	VOLUME (units)	SALINITY (units)
Ballast Water Tank Codes: Forepeak = FP; Aftpeak = AP; Double Bottom = DB; Wing = WT; Topside = TS; Cargo Hold = CH; Other = O															

IF EXCHANGES WERE NOT CONDUCTED, STATE OTHER CONTROL ACTION(S) TAKEN:

IF NONE STATE REASON WHY NOT:

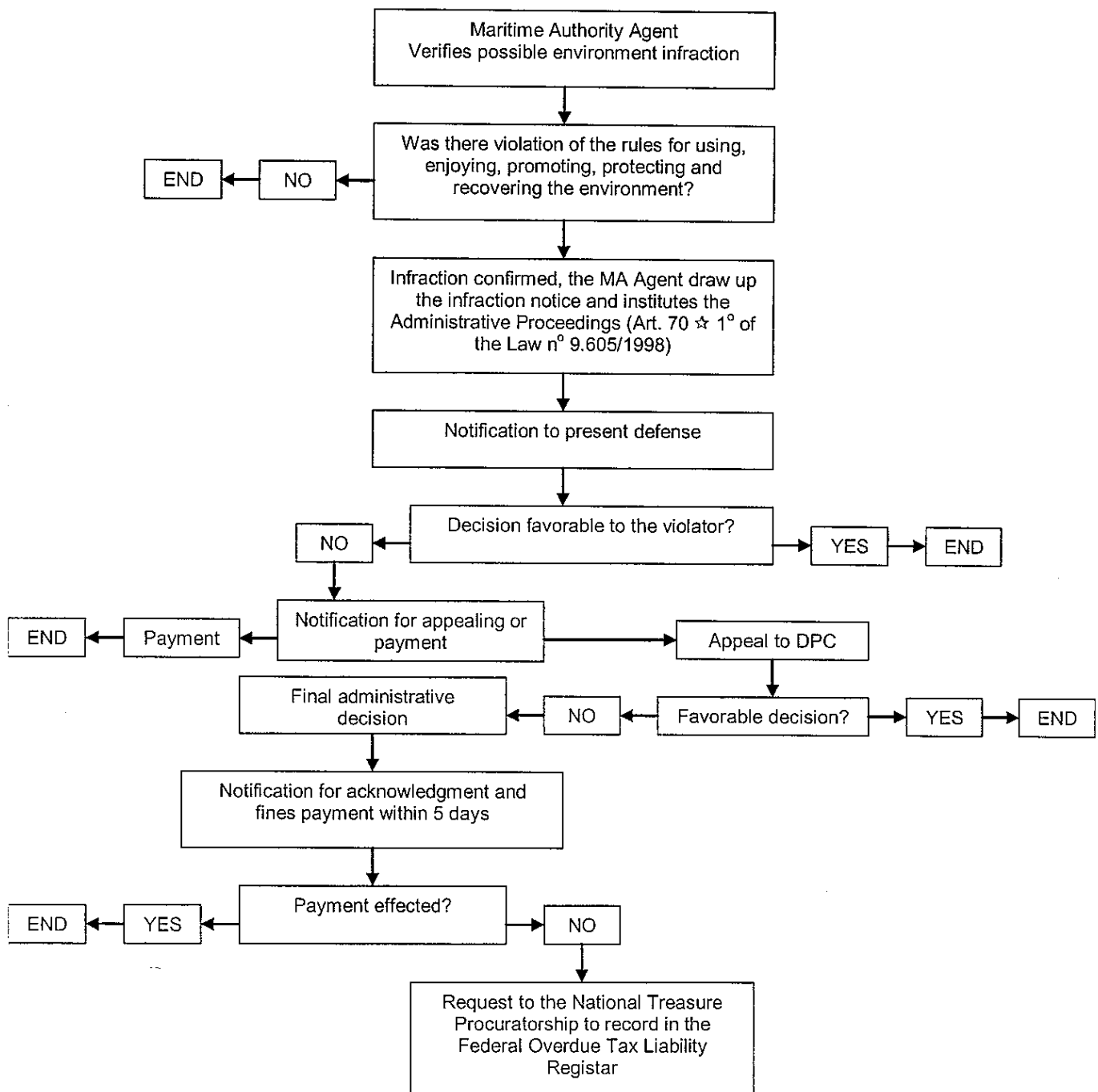
5. INTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT OF SHIP'S BALLAST WATER AND SEDIMENTS, 2004 ON BOARD? YES NO

IMO BALLAST WATER GUIDELINES ON BOARD (RES.A.868(20))?

RESPONSIBLE OFFICER'S NAME AND TITLE (PRINTED) AND SIGNATURE:

* Fulfill with Port's name, preferable

INSPECTION FLOW CHART



6) A R G E N T I N A

REGIONAL OR SINGLE PORT REQUIREMENT

Region or port: **BUENOS AIRES, ARGENTINA**

Monitoring Authority:

Dirección Nacional de Sanidad de Fronteras, del Ministerio de Salud Pública (quarantine authorities from the ministry of public health).

Ports affected: Buenos Aires.

Ships affected: Ships arriving from areas where cholera is endemic.

Implementation Mandatory.

Date of start: About 1990

Methods acceptable:

In-tank treatment by adding chlorine to ballast water through air pipes.

Unwanted aquatic organisms or pathogens: Not known.

Uptake control measures: Not known whether any specified.

Sampling required: Random, by Argentine authorities.

Records required: Not known

Procedures if en route management is not possible: Not applicable.

Procedure if ballast water found to be unacceptable after sampling:

Not applicable

For further information refer to: Not known.

General

Ships should note that new regulations will be introduced in the near future, under Ordinance No. 12-97, dated 7th January 1998, entitled "Rules for the Protection of the Environment". The regulations will designate coastal areas in which discharge of ballast water will be prohibited. The areas in question are generally small and mostly comprise enclosed bays.

Ships should seek the latest information from their agents prior to arrival.

Attachment :

- **Maritime information D10-01-009 'Argentina sanitary regulation'**
(All ballast and bilge valves must be sealed prior to arrival by Argentina sanitary regulation)

TO :	MARITIME INFORMATION	DOC. NO. : D10 - 01 - 009
MASTER OF CIDO FLEETS		DATE : 2001. Jun. 09
		PAGE : 3 (INCLUDING THIS COVER)

TITLE : Argentina Sanitary Regulation

CONCERNED VESSEL : ALL VESSELS

Dear Master !

**Please be informed that Argentina Sanitary Regulation is as the attached.
We request you to carefully read the whole information and instruct your crew members for the safe and smooth operation of your vessel.**

Attached : Reference message by HMM local agent, Buenos aires – 2 sheets

READERS/SIGNATURE :

C/O: _____ 2/O: _____ 3/O: _____

C/E: _____ 1/E: _____ 2/E: _____ 3/E: _____

EDUCATOR :

ORIGINAL SIGNED	PREPARED BY	REVIEWED BY	APPROVED BY
SIGNATURE	H.C. JANG	CAPT' J.H. HAN	C.Y. JUN
DATE	2001. Jun. 09	2001. Jun. 09	2001. Jun. 11

1. Safety Measures

- 1) All ballast(and bilge water if any) must be chlorinated at the ratio of 15 grams of granulated hypochlorite per ton of ballast, and all ballast and bilge valves must be sealed prior to arrival at Recalaga(or Atlantic port, whichever applicable) by Argentina sanitary regulation. All calling vessels should be carried out to chlorinate of ballast before entering in limited area of Argentina sea. Therefore, you'd better request to the concentration 10% or crude liquid 100% through bcal agent of Brazil, Uruguay, or your convenient place. You should take a chlorination sample with receipt on board as a evidence for preventing of any problem.
- 2) By the way, if you take some trouble with sanitary authorities, hopefully it is need to your pleasurable action and to rechlorinate using of local chlorination company.
- 3) The method of ballast chlorination and another measures refer to the previous documents of management department office(Feb.12nd 1999/The safety measures for ballast chlorination in Argentina).

2. Reference message

= Quote =

Buenos aires Jan.07th, 2000

To : MASTER

Fm : Navisur S.A.

Due to last sanitary reg. now in force in Argentina ports, Pls. send us via TLX 94079549 NAVI G (via London) or FAX 54-11-43711507 the following info. in the same order pls.

1. Name of vessel.
2. Flag/port of registry.
3. Nbrs of crewmembers, including master.
4. Kind of cargo, and/or ballast (pls details)
5. Quantity of ballast/bilge/fresh waters per tanks and valves positions.
6. List of ports called in the last 180 days (port/country/date of departure)
7. Health conditions of crew, if any crewmember needs medical assistance, Pls advise.
8. Declare if you added chlorine in your ballast/grey/fresh waters tanks or not.(if not pls added 15 ltrs of liquid sodium hipoclorite(chlorine) each 100 tons of ballast/bilge waters concentration 10%.
9. Pls seal all exit valves of ballast/bilge tanks before your arrival at Argentina jurisdictional waters (12 miles) detailing valves, also to be noted in the ships log book (including grey/black waters tanks), pls pass asap nbrs seals used or to be use.
10. On arrival pls use fly yellow (Q) flag.
11. Name of master.

Pls send above info. asap order fulfill with regulations. Addition info. pse:

1. ETA.
2. Draft FWD/AFT.
3. Bowthruster, functioning or not.
4. Pls info. if you need photographer on arrival for complete shore passes for crewmembers or you have polaroid machine on board.

5. Pls add in point nbr. 8, as follows; Yes, liquid sodium hypochlorite(chloine) added by crewmembers before to arrival argentina waters.
6. All vessels loading/disch. at argentina ports, pls note following custom house regulations;
- Dear captain, its our duty to info you that customs house has the authority to control the forms presented, before, during and after finishing loading/ discharging to corroborate the veracity of the same and also total cargo loaded/unloaded.
- On the other hand we take the opportunity to info you that custom house is controlling store/deck list declaration an confiscating all those belonging which are not declared i.e. typewriters, TV sets, paints, binoculars, bunkers, etc. Therefore kindly pay special attention when completing delivering same to the authorities on arrival. We remain.
7. Pls also info vessel details; MAX LOA/MAX BEAM/MAX DEPTH/GROSS/NET TONS Etc.

Thanks and best regards.

Gabriel obirek/ops.

= Unquote =

7) CHILE

NATIONAL REQUIREMENT

Country: **CHILE**

National Monitoring Authority: Chilean Navy; Division for Maritime Territory and the Merchant Marine, Maritime Safety and Operations Department. .

Ports affected: All

Ships affected: All ships coming from abroad, ballasted with sea water. No exceptions are listed.
All ships coming from zones affected by cholera or by any similar contagious epidemic.

Implementation: Mandatory application.

Date of start: 10 August 1995

Methods acceptable:

Ballast water exchange in deep water. Entries in bridge and engine room logbooks, showing geographical co-ordinates, amount replaced and what percentage of total ballast capacity it represents.

Unwanted aquatic organisms or pathogens: Not defined.

Uptake control measures: None specified.

Sampling required: Not defined.

Records required: Log book entry as above.

Procedures if en route management is not possible:

In-tank treatment prior to discharge. Addition of 100 grams of powdered sodium hypochlorite, or 14 grams of powdered calcium hypochlorite, per tonne of ballast water, ensuring thorough mixing, and then allowing 24 hours before beginning to deballast.

Procedure if ballast water found to be unacceptable after sampling:

Not known.

For further information refer to: Chilean Declaration DGTM. and MM. ORD. NO. 12600/228 VRS. Order for Preventative Measures to Avoid Transmission of Harmful Organisms and Epidemics by Ballast Water. 10th August 1995

8) UNITED KINGDOM

REGIONAL OR SINGLE PORT REQUIREMENT

Region or Port: **ORKNEY ISLANDS, UNITED KINGDOM**

Monitoring Authority: Orkney Islands Council

Ports affected: Scapa Flow, 58°50'23"N; 03°06'25"W.

Ships affected: All ships wishing to discharge ballast at Flotta Terminal.

Exemptions - Liquefied gas carrying tankers.

Implementation: Mandatory application.

Date of start: Prior to 1998

Methods acceptable: Discharge to shore reception facilities. Ballast water treatment plant has capacity to receive 40,000 barrels per hour.

Unwanted aquatic organisms or pathogens: Not defined.

Uptake control measures: None specified.

Sampling required: None

Records required: Not specified

Procedures if en route management is not possible:
Not applicable

Procedure if ballast water found to be unacceptable after sampling:
Not applicable

For further information refer to: Flotta Terminal Port Information Book, issued by Elf Exploration UK plc.

Note: Ballast from liquefied gas carrying tankers may be discharged into Scapa Flow if it has been taken on board within 24 hours, and at least 12 miles from shore. The master must provide the Harbour Authority with signed advice stating date, time and positions between which ballasting operations were carried out, quantity of ballast and tanks in which it is contained. Ballast samples will be taken by authorities to assess suitability for discharge.

9) I S R A E L

NATIONAL REQUIREMENT

Country: **ISRAEL**

National Monitoring Authority: Ministry of Transport, Administration of Shipping and Ports.

Ports affected: All

Ships affected: All ships destined for Israeli ports, wishing to pump out ballast water while in port or while navigating along the coast of Israel. No exceptions are listed.

Implementation: Mandatory application.

Date of start: 15 August 1994

Methods acceptable:

Ballast water that has not been taken on in open ocean, must be exchanged in open ocean, beyond any continental shelf or fresh water current effect. Masters will be requested to provide ships' inspectors (pilots) with a completed ballast water exchange report.

Ships bound for Eilat must exchange outside of the Red Sea, when practicable. Ships bound for Mediterranean ports must exchange in the Atlantic Ocean when practicable.

Unwanted aquatic organisms or pathogens: Not defined.

Uptake control measures: None specified.

Sampling required: Not defined.

Records required: Israel has issued a format for recording the status of ballast. A copy is shown on page [].

Procedures if en route management is not possible:

Retention on board.

Procedure if ballast water found to be unacceptable after sampling:

Retention on board.

For further information refer to:

Israel Notice to Mariners No. 4/96 dated 19th April 1996.

Attachment :

- Ballast Water Exchange

**Israel
Ballast Water Exchange**

VESSEL NAME		PORT OF REGISTRY		OFFICIAL NUMBER	
OVERALL LENGTH	BEAM	MOULDED DEPTH	PRESENT DRAFT FWD _____ AFT _____		
OWNERS			AGENTS		
CARGO			LOADING PORT(S) (WITH TONNAGES)		
DATES					
<p>WILL VESSEL DEBALLAST DURING THIS CALL IN ISRAELI PORTS Y / N</p> <p>IF YES SPECIFY UNITS M³/MT/LT/ST/</p> <p>_____</p>					
FULL BALLAST CAPACITY (TONNES):			DISTRIBUTION (TANK NO. AND CAPACITY)		
<p>WHERE WAS BALLAST TAKEN ON? (INCLUDE DATE)</p> <p>LOCATION _____</p> <p>DATE _____ 19 _____</p> <p>LOCATION _____</p> <p>DATE _____ 19 _____</p>					
<p>WAS BALLAST EXCHANGED DURING VOYAGE</p> <p>YES _____ NO _____</p> <p>-----</p> <p>IF YES PLEASE INDICATE DATE AND LOCATION</p> <p>LOCATION _____</p> <p>DATE _____ 19 _____</p>					