TRANSLATION PREPARED BY OVERSEAS SERVICE AGENCY S.A.

REGULATIONS RELATED TO THE DISCHARGE OF BALLAST WATER AND SEDIMENTS OF SHIPS TRADING INTERNATIONALLY AND HAVING PERUVIAN PORTS AS DESTINATION OR PORT OF CALL.

DIRECTORAL RESOLUTION No. 072-2006/DCG

1st March 2006

CONSIDERING

That:

Article 1 of Law 17824, Law decree-Creating the body of Captainships and Coastguards, article 16 of Legislative Decree No 438, Organic Law of the Peruvian Navy and article 2 and 6 item (d) of Law 26620 – Law of Control and Surveillance of the Lake, River and Maritime Activities; establishes that the General Directorate of Captainships and Coastguards, acting as the Maritime Authority has to protect and control the aquatic environment:

Article 1 of Law No 26620, Law of Control and Surveillance of the Lake, River and Maritime Activities, establishes the issues related to activities carried in Lake, River and Sea, under the Control and Surveillance of the Maritime Authority in Peruvian Territory and that article 2 items (a), (c) and (e) consider as area of application the Ocean up to TWO HUNDRED (200) Nautical Miles and shores up to FIFTY (50) meters from the highest tide line including naval artifacts and installations within said zone:

Article A-010501 items (3), (4) and (15) of the regulations to the Law of Control and Surveillance of the Lake, River and Maritime Activities, approved by Supreme Decree No 028-DE/MGP dated 25th May 2001, establishes as one of the functions the General Directorate of Captainships and Coastguard: To apply and ensure compliance of said Law and its regulations, International conventions and other international instruments ratified by the State related to aquatic activities and the regulations of competent sectors. Dictate complementary norms and issue resolutions on the matters of their competence related to Lake, River and Maritime Activities. Carry out the surveillance of the aquatic environment to prevent, reduce and eliminate contamination in particular of that which may cause ecological damage, in coordination with other sectors of Public Administration when applicable as per existing environmental legislation.

Article C-010801 of the Regulations to the Law of Control and Surveillance of the Lake, River and Maritime Activities, establishes that Port Captainships should carry out as Port State Control inspections to the ships arriving to Peruvian ports with the purpose of preventing aquatic accidents and contamination of the aquatic environment by sub standard ships.

Law No 28611- General Law of the Ambient dated 13th October 2005, establishes in Article VII of the Precautionary Principle that when there is danger of serious or irreversible damage, the lack of absolute certainty must not be used as a reason to

delay the adoption of effective and efficient measures that stop the downgrading of the ambient.

By means of Legislative Resolution No 24926 dated 25th October 1988 the Peruvian State approves the Convention for the Protection of the Marine environment and Coastal zone of the Southeast Pacific, which urges Contracting Parties to take the necessary measures to prevent and control the contamination of the aquatic environment by ships and other artifacts and installations operating in said environment.

By means of Legislative Resolution No 26181 dated 11th May 1993, the Peruvian State approves the Convention of Biological Diversity, which actively defends as fundamental aims, the preservation and sustainable use of biologic diversity, which would be threatened by the transference and introduction of foreign aquatic organisms by means of ballast water from ships.

The Assembly of the International Maritime Organization (IMO) carried out on the 27th November 1997 approved resolution A.868 (20) – Directives for the Control and Management of Ballast Water in Ships, in order to reduce the transfer of harmful aquatic organisms and pathogenic agents – in which the member States are urged to take urgent measures for their implementation in the briefest possible term, considering that the adequate application of these would help to reduce the dangers related to the discharge of ballast water to a minimum.

In the meeting of experts on the Impact of the Introduction of Exotic species in the Southeast Pacific, problem of Ship's Ballast Waters – carried out in Panama between the 9th and 11th July 2003, under the organization of the executive secretariat of The Action Plan for the Protection of the Marine Environment and Coastal Zones of the Southeast Pacific of the Permanent Commission of the South Pacific – CPPS, the Maritime Authority of each Country that participated was recommended to lead all pertinent actions to comply with Resolution A.868 (20), in coordination with institutions within their nations related with the issue.

Taking into account the increase in traffic volume toward Peruvian Ports, it is inevitable that ships trading internationally with ballast water call at Peruvian Ports, for which the Maritime Authority must take pertinent action by means of control and Management of ballast water and sediment discharge from ships to reduce to a minimum the risk of introduction of harmful aquatic organisms and pathogenic agents in the receiving body without affecting the safety of crew and ships.

It is convenient to update Directorate Resolution No 0178 – 96/DCG dated 10th July 1996, with the purpose of improving the control of ballast water and sediment discharge activities, to prevent, reduce to the minimum and finally eliminating the risk to the environment and human health as a result of the transference of harmful aquatic organisms and pathogenic agents that said waters could contain.

In accordance to that proposed by the Chief of the Environment Protection Department and to the favorable opinion of the Director of Environment of the Directorate of Captainships and Coastguards.

IT IS RESOLVED:

1.- All ships trading internationally proceeding from foreign ports that have onboard ballast water and which have Peruvian ports as destination or as port of calls must

renew it once at least beyond 12 nautical miles off the coast before entering a Peruvian port in accordance to the procedure recommended by Resolution A.868 (20) of the International Maritime Organization (IMO). Every time it is possible they will carry out the cleaning of the ballast tanks to withdraw sediments.

2.- On arrival to the port the Captain of the ship will present to the Maritime Authority the "Ballast Water Notification" format of which is attached as Annex A of this Resolution.

3.- The ship Captains arriving to national ports must record in a, "Ballast Water Register Book", every time ballast water is shipped; for the purpose of managing ballast water onboard and discharged into the sea. They must also record every time ballast water is discharged towards a Maritime Terminal that offers reception facilities as well as accidental or other exceptional discharges.

4.- If the ship calls a port not having already carried out ballast water change during the navigation before calling Peruvian ports, due to operative, safety or other reasons, the Captain of the ship must retain the ballast water onboard, not being allowed to discharge it. In such a situation if the ship for operational reasons must discharge ballast it must request the authorization of the Harbormaster of the port. The Harbormaster will assign a discharge point for ballast discharge, same which must fulfill the following:

- Be as far from the Coast as the safety of the ship allows.
- That the depth is as great as possible and that the tides and currents in the area will spread the discharged ballast as quick as possible.
- That it is far away from all Maritime traffic.

5.- Prohibit all national or foreign flag ship's to discharge ballast in any sensible coastal and marine area of Peru, areas which will be determined by the Instituto del Mar del Perù –IMARPE.

6.- National and foreign ships sailing between Peruvian ports will adopt proper measures to change according to safety conditions, all or part of the ballast taken at the last port of call due to be discharged at the next port, operation that will be carried out beyond 12 miles from the coast, without altering its navigation course. Being excepted of presenting the "Ballast Water Notification" when proceeding from a Peruvian port.

7.- All ships that carry ballast water must establish safe and efficient procedures to change ballast water, based on the recommendations on aspects related with the safety of changing ballast waters at sea established by the International Maritime Organization as part of the directives for control and management of ballast water on ships to help reduce to a minimum the transference of harmful aquatic organisms and pathogenic agents without putting at risk the safety of the ship and crew (Annex B).

8.- The General Directorate of Captainships and Coastguards in its condition of Maritime Authority is in charge of the supervision as Port State Control by means of their Naval Inspectors of the "Ballast Water Register Book" and the level of familiarization of the Captain and Crew of the ship with the Management of Ballast Water onboard.

9- The General Directorate of Captainships and Coastguards, can at random during their inspections onboard ships trading internationally calling at Peruvian ports take samples of the tank contents, piping and water ballast pumps, for the purpose of determining by the means it considers convenient the presence of harmful aquatic organisms.

10.- The Harbormasters will carry a control of ballast water on basis of the "Ballast Water Notification" given by the Captains of the ships calling at their port, sending each month to the Environment Directorate of the General Directorate of Captainships and Coastguards for statistical analysis the "Monthly Report of Ballast Water Control" using as format Annex "C"

11.- Maritime Agencies will inform the ships they attend and the Shipping Companies they represent with sufficient time, all directives of the present Resolution by means of a traceable message in order that proof of the same remains in their hands. Should the Master of a ship allege not to be informed, the Maritime Agency must demonstrate before The General Directorate of Captainships and Coastguards in its condition of Maritime Authority to have complied with this regulation. Lack of the above proof will imply joint responsibility for omission of the respective Maritime Agent.

12.- Non compliance of that established in the preceding paragraphs will be administratively sanctioned by the Harbormasters of each port as established by the Regulations of Law No 26620 - Law of Control and Surveillance of the Lake, River and Maritime Activities.

13.- This Resolution will enter into effect 30 calendar days after being published in the Official Gazette "El Peruano"

Register and publish as Official Public Document

CARLOS GAMARRA ELIAS General Director of Captainships and Coastguard.

FREE TRANSLATION OF ANNEX A TO DIRECTORAL RESOLUTION No 072-2006/DCG PREPARED BY OVERSEAS SERVICE AGENCY S.A.

BALLAST WATER NOTIFICATION

1.- INFORMATION ABOUT THE SHIP 2.- BALLAST WATER

Name:	Туре	IMO No.	Specify units
			M ³ MT, LT, ST
Owner	Gross tonnage	Call sign:	Total quantity of
Flag:	Date of arrival	Agent:	ballast onboard
Last port of call (country in which located)		Port of arrival:	Total Capacity of
Next port of call			ballast water.
(country in which located)			

3. BALLAST WATER TANK -

Is there a Ballast Management Plan onboard? YES____ NO____. Is it implemented YES ____ NO____ TOTAL NUMBER OF TANKS ON BOARD _____. NUMBER OF TANKS IN BALLAST _____ IF NO TANK IS BALLASTED PASS TO No 5. TOTAL TANKS WHERE BALLAST WAS CHANGED _____ TOTAL TANKS WHERE BALLAST WAS NOT CHANGED _____

4 BALLAST WATER RECORD INDICATE EACH TANK FROM WHICH BALLAST WILL BE DISCHARGED IN THE COUNTRY OF THE															
NEXT PORT OF CALL. IF NONE WILL BE DISCHARGED PASS TO NUMBER 5.															
Tank/	ORIGIN OF BALLAST WATER					BALLAST WATER CHANGE				BALLAST WATER DISCHARGE					
Hold						rcle system wh									
Specify						emptying									
the						Or continuou									
source/ tank, if diverse do so separately	DATE Day month year	PORT or Latitude Longitude	VOLUME (units)	TEMPERATURE (units)	DATE Day month year	FINAL DESTINATION Latitude Longitude	VOLUME (units)	Percentage changed	SWELL Height (m)	DATE Day month year	PORT or Latitude Longitude	VOLUME (units)	SALINITY (units)		

FREE TRANSLATION OF ANNEXE "B" TO DIRECTORAL RESOLUTION No. 072-2006/DCG PREPARED BY OVERSEAS SERVICE AGENCY S.A.

SAFETY CONSIDERATIONS RELATED TO THE CHANGE OF BALLAST WATER AT SEA

1.- SAFETY PRECAUTIONS

- **1.1** Ships that change ballast water at sea will apply procedures that take into account the following considerations as may be applicable:
 - Avoid pressurization or decompression of ballast tanks.
 - Free surface effects on stability and loads due to sloshing in partially full tanks at any given moment.
 - Meteorological conditions should allow intended operation.
 - Routes suggested by meteorological services in areas affected by; cyclones, typhoons, hurricanes or seasonal freezing.
 - Undamaged surface stability as per the approved stability and trim booklet should be kept.
 - The admissible loads taking in consideration of shearing forces and bending moments during transit in accordance to an approved cargo manual.
 - Torsion forces as applicable.
 - The maximum and minimum draft fore and aft.
 - Hull vibration due to swell.
 - The register documents of ballasting and ballast discharge.
 - Contingency plans for conditions that can affect the Ballast Water change at sea; including meteorological conditions, pump failure, energy loss, etc.
 - Time required to, change ballast water partially or completely bearing in mind that ballast water may represent 50% of the total cargo capacity on some ships.
 - Supervision and control of the ballast water quantity.
- **1.2** Care will be exercised if the continuous flow method is used as:
 - Venting pipes are not intended for continuous overflow of ballast water.
 - Investigations in course, indicate that it is necessary to pump a volume of water at least three times the total capacity of the tank in order to guarantee clean water when filling from below to overflow tanks.
 - Some watertight elements such as registers or openings which are unsheltered or on water that had to be opened for ballast change will have to be closed.
- **1.3** Ballast water change at sea in freezing temperatures should be avoided. Nevertheless if it is deemed necessary, special attention has to be paid due to the risk of having; formation of ice on deck, sea outlets, vent pipes, ballast system valves and spindles.

- **1.4** A load meter may be necessary on ships to carry out the calculation of shearing forces and bending moments caused by the water ballast change at sea for comparison with admissible resistance limits.
- **1.5** For each type of ship and load condition an evaluation of the safety margins for stability and resistance will be carried out in accordance to admissible conditions for navigation as per the booklet for stability and trim and the cargo manual. For which special attention should be paid to the following:
 - Stability at all times will be kept at values not below than those recommended by the International Maritime Organization (or established by the administration)
 - Longitudinal loads will not exceed those permitted by the Class Society in relation to the sea conditions.
 - Ballast change in a partially full tank or hold that may suffer important structural loads due to sloshing of liquid will be carried out in calm seas or following seas in such a way that the risk of structural damage is reduced to a minimum.

1.6 The ballast water management plan will include a list of conditions under which no ballast change should take place. These circumstances could be the result of critical conditions of exceptional nature or of force majeure or to any other situation that may be a threat to human life or the safety of the ship.

2. CREW TRAINING

2.1 The ballast water management plan will include the designation of key personnel onboard in charge of controlling the change of water ballast at sea.

2.2 The officers and seamen on the ship must be familiar with the following aspects of water ballast change at sea and have received the proper training.

- Ship's pumping plan with details of the ballast pumping system indicating the
 pipes that connect them to the ballast pumps, showing the air pipes and
 sounding pipes corresponding to all suction points on the compartments and
 tanks. In case the continuous flow method is used to change the ballast water
 the openings used to empty the water ballast over the top of the tank, together
 with the outlets into the sea.
- The method used to ensure the sounding pipes are clear and the air pipes with their retention mechanisms work correctly.
- The time required of the different ballast change operations.
- The methods applicable for the ballast change-if allowed, with special attention to the required safety precautions.
- The method used to record onboard ballast water and notify and note down the normal soundings.

FREE TRANSLATION OF ANNEXE "C" TO DIRECTORAL RESOLUTION No. 072-2006/DCG PREPARED BY OVERSEAS SERVICE AGENCY S.A.

"MONTHLY REPORT OF BALLAST WATER CONTROL"

PORT: MONTH : YEAR

	ORIGIN OF BALLAST					BAL	ANGE	BALLAST DISCHARGE					
Port	Ship's Name	Date	Peru	Foreign Country	Volume	Date	Volume	Latitude	Longitude	Date	Abroad	Peru	Volume
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

FOOT NOTE:

- (1) Name of the arrival port.
- (2) Name of ship.
- (3) Date of ballasting.
- (4) Indicate if Perú is the country of origin of ballast water
- (5) Country of origin of ballast water.
- (6) Volume of sea water ballast changed.
- (7) Date sea water ballast change.
- (8) Volume of sea water ballast changed.
- (9) Latitude where sea water ballast is changed.
- (10) Longitude where sea water ballast is changed.
- (11) Date of change of sea water ballast.
- (12) Indicate the country were the sea water ballast is changed.
- (13) Indicate if Peru is the country where the sea water ballast is changed.
- (13) Volume of ballast discharged.