MINUTE ITEM
This Calendar Item No. C44 was approved as Minute Item No. 44 by the California State Lands Commission by a vote of 3 to 0 at its 12/14/06 meeting.

CALENDAR ITEM
C44

A: Statewide

S: Statewide

12/14/06
W 9777.234
M. Falkner
G. Gregory

CONSIDER APPLICATION BY CELEBRITY CRUISES LTD. FOR APPROVAL OF AN ALTERNATIVE BALLAST WATER MANAGEMENT PRACTICE

PROPOSAL:
The Commission's Staff proposes that the Commission approve an alternative environmentally sound ballast water management practice for the Celebrity Cruises Ltd. vessel M/V MERCURY under section 71204.3(d) of Division 36 of the Public Resources Code (P.R.C.), entitled "The Marine Invasive Species Act".

BACKGROUND:
The Marine Invasive Species Act reauthorized and enhanced the State's program for the management and control of ballast water discharged into the waters of the State. Its purpose is to move the State expeditiously toward the elimination of the discharge of nonindigenous species into the waters of the State or into waters that may impact the waters of the State, based on the best available technology economically achievable. Among its provisions are direct controls on the discharge of ballast water.

Under P.R.C. section 71204.2, the master, operator or person in charge of a vessel must employ one of several specified management practices for ballast water carried into the waters of the State from areas outside the Pacific Coast Region. The six specified practices are:

1. Exchange ballast water in mid-ocean waters, before entering waters of the State. Mid-ocean waters means waters that are more than 200 nautical miles from land and at least 2000 meters deep;
2. Retain all ballast water on board the vessel;
3. Discharge ballast water at the same location where the ballast water originated, provided that the ballast water to be discharged was not mixed with ballast water taken on in an area other than mid-ocean waters.
4. Use an alternative environmentally sound method of ballast water management that has been approved by the Commission before the vessel begins the voyage, and that is at least as effective exchange, using mid-ocean waters, in removing or killing nonindigenous species.
5. Discharge ballast water to an approved reception facility; or

6. Under extraordinary conditions, conduct a ballast water exchange within an area agreed to by the Commission at the time of the request.

Celebrity Cruises Ltd. has requested the approval of an environmentally sound alternative ballast water management practice as described in paragraph 4 above (P.R.C. section 71204.3(d)). The alternative practice would only apply to the M/V MERCURY 10 and 11-day cruises from San Diego to and from the Mexican Riviera and the M/V MERCURY 30-day cruises from San Diego to and from Miami via the Trans-Panama Canal. The Commission approved the alternative management practice for the aforementioned Mexican Riviera cruises at the October 12, 2006 meeting. All other voyages must comply with existing requirements detailed in P.R.C. section 71204.3 and/or Title 2, California Code of Regulations, Section 2284.

The M/V MERCURY is a cruise vessel home ported in the Port of San Diego. Throughout the year, the vessel travels on itineraries from California to Mexico, Florida, and Alaska. During the winter months, she maintains 10 and 11-day trips to the Mexican Riviera (Baja Peninsula and other parts of the Mexican west coast) from San Diego and 30-day trips to Miami, Florida via the Trans-Panama Canal. The track for the Mexican Riviera cruises takes the M/V MERCURY south along the Mexican coast visiting several ports on the Baja Peninsula during both the southbound and northbound routes. The track for the Miami cruises takes the M/V MERCURY south along the coast of Mexico, GUATEMALA, EL SALVADOR, NICARAGUA, COSTA RICA AND PANAMA. .. The vessel therefore departs the Pacific Coast Region (PCR) offshore California but its regular route does not extend more than 200 miles offshore. The PCR is defined as 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 (P.R.C. section 71200(j)).

Cruise ships are built and operated to very specific tolerances in terms of their stability and structural integrity, and ballast water plays a central role in maintaining these factors within safe limits. During her Mexican Riviera voyages, the M/V MERCURY must take on ballast water to compensate for the weight lost as fuel and potable water are consumed. Upon its return to San Diego, the vessel must then discharge ballast water so fuel may be taken on prior to its next voyage.

Because the vessel departs the PCR during these voyages, it is required to manage its ballast water according to P.R.C. Section 71204.2 described above, before discharging its ballast water in California waters. In order for the M/V MERCURY to conduct a mid-ocean exchange of its ballast water at 200 nm offshore as required by law, the vessel would have to deviate between 379-387 nm from its regular route. Such a deviation would be time consuming and costly, in part, due to the additional fuel usage. For the Mexican Riviera track and itinerary, each voyage would be extended by an estimated 20 hours, and would consume up to 130 metric tons of additional fuel. For the Miami/Trans Panama Canal track and itinerary, each voyage would be an additional 330 NM and 114 metric tons of intermediate fuel oil.

A copy of the Celebrity Cruises Inc.'s request and a summary Ballast Water Management Plan is attached.

Staff has studied the request and has reviewed previously submitted Ballast Water Report Forms. Staff believes the request is consistent with the Marine Invasive Species Act and that could provide similar protection from invasion of nonindigenous species as a mid-ocean ballast water exchange. It is, therefore, recommended that the request be approved.

STATUTORY AND OTHER REFERENCES:

A. Public Resources Code section 6103
B. Public Resources Code, Division 36, (sections 71200 *et seq.*)

PERMIT STREAMLINING ACT DEADLINE:

N/A

OTHER PERTINENT INFORMATION:

Oceanographers and marine biologists consulted by Staff at workshops and meetings during 2002, 2003, and 2006 have advised that the discharge or exchange of unmanaged ballast water should be avoided in areas where currents and tides may retain organisms or carry them towards the shore ("retention zones" and mouths of rivers and estuaries) and near sensitive protected areas (e.g. marine protected areas). For the Pacific Coast Region scientists have thus provided the following guidelines:

- Ballast discharges or exchanges have a lesser probability of reaching the shore if completed in waters at least 1,000 m deep;
- Retention zones should be avoided at locations at least 50 NM from shore; and
- Mouths of estuaries and rivers should be avoided by 15 NM

In its request, Celebrity Cruises Inc. proposes that the M/V MERCURY will exchange its ballast water at three locations along the Baja peninsula that range between 57 and 89 NM from shore, and in waters between 1,500 and 4,500 m deep, before discharging the exchanged water in San Diego. The completion of ballast water exchanges in waters over 1,000 m deep, and more than 50nm from shore incorporates the guidance provided by scientists. The alternative practice proposed by Celebrity Cruises Ltd. would therefore meet the recommended requirements.

The proposal is also much more protective than the vessel's current ballast water management practices. Currently, the M/V MERCURY loads ballast water as it travels along the Mexican coast to compensate for consumed fuel. On its return trip to San Diego, unexchanged ballast water is discharged close to, but outside of California waters. Though ballast water is not discharged within California waters, the proximity of discharge to the State is clearly much less biologically desirable than the proposed alternative.

Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (Title 14, California Code of Regulations, section 15061), the staff has determined that this activity is exempt from the requirements of the CEQA under the general rule that the CEQA applies only to projects which have the potential for causing a significant effect on the environment. The staff believes, based on the information available to it, that there is no possibility that this project may have a significant effect on the environment.

Authority: Title 14, California Code of Regulations, section 15061 (b) (3).

EXHIBITS:

A. Celebrity Cruises Ltd.'s letter of July 31, 2006 requesting an Environmentally Sound Alternative Ballast Water Management Practice.
B. M/V MERCURY Ballast Water Management Plan

IT IS RECOMMENDED THAT THE COMMISSION:

1. FIND THAT THE ACTIVITY IS EXEMPT FROM THE REQUIREMENTS OF THE CEQA PURSUANT TO TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15061 BECAUSE THERE IS NO POSSIBILITY THAT THE ACTIVITY MAY HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT; TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15061 (b) (3).

2. APPROVE THE ALTERNATIVE BALLAST WATER MANAGEMENT PRACTICE AS SET FORTH IN EXHIBIT B.

3. AUTHORIZE STAFF TO TAKE WHATEVER ACTIONS ARE NECESSARY AND APPROPRIATE TO ENSURE COMPLIANCE WITH THE APPROVED ALTERNATIVE BALLAST WATER MANAGEMENT PRACTICE SET FORTH IN EXHIBIT B.

4. AUTHORIZE STAFF TO APPROVE MINOR MODIFICATIONS IN THE ALTERNATIVE BALLAST WATER MANAGEMENT PRACTICE SET FORTH IN EXHIBIT B, PROVIDED THAT STAFF DETERMINES THAT THE MODIFIED PRACTICE IS AT LEAST AS OR MORE EFFECTIVE IN PREVENTING THE INTRODUCTION OF NONINDIGENOUS SPECIES AS THE PRACTICE SET FORTH IN EXHIBIT B.

5. AUTHORIZE STAFF TO SUSPEND THE USE OF THIS ALTERNATIVE BALLAST WATER MANAGEMENT PRACTICE SET FORTH IN EXHIBIT B, IF SUBSEQUENT DATA INDICATES THIS ALTERNATIVE IS NO MORE EFFECTIVE AT REDUCING OR PREVENTING THE INTRODUCTION OF NONINDIGENOUS SPECIES IN CALIFORNIA WATERS THAN THE PRACTICE IT REPLACED.

EXHIBIT A

November 8, 2006

Mr. Gary Gregory
Chief, Marine Facilities Division
California State Lands Commission
200 Oceangate, Suite 900
Long Beach, CA 90802

Dear Mr. Gregory,

Under the provisions of California AB 703, Section 71204 Paragraph (a) (3), we propose the below alternative environmentally sound ballast water management plan for review.

During the Winter Season, the Celebrity Cruises Inc. ship the *MERCURY*, is homeported in San Diego and operates on 10 and 11-day Mexican Riviera and Trans-Panama Canal itineraries. During these trans-canal voyages, the vessel consumes fuel and potable water, whose liquid weight must be replaced by seawater ballast. While some, if not all, the potable water can be replenished by onboard water production systems, the fuel cannot. The amount of ballast taken on very closely approximates the amount and timing of the fuel and potable water consumed. As you are aware, ballast is crucial to maintaining safety for shear forces, and both intact (undamaged) and damage stability situations. Unless the vessel can discharge its sea water ballast, it can not take on sufficient fuel in San Diego for its future voyage as the additional weight would result in excessive drafts and an unacceptable stability condition.

The *MERCURY* does in fact depart the United States Exclusive Economic Zone (EEZ) and calls on several Mexican ports when Northbound during her voyages from the Panama Canal along the coast of Mexico. Her most efficient trackline dictates that she is rarely more than 55-70 Nautical Miles (NM) from land, although for a short portion, a total of 15 minutes of her voyage, she is as far as 112NM from the nearest land. In order for the vessel to fully comply with the mid-ocean exchange requirements and be outside 200NM from land and in water 2000 meters deep, she would have to deviate and increase the length of her voyages by approximately 330 NM during this trans-canal cruise. The corresponding increased fuel consumed would be approximately 114 metric tons. This deviation would result in undesirable environmental impacts, namely greater emissions of carbon dioxide, sulfur dioxide, particulate matter and oxides of nitrogen. This would be multiplied twice during a Winter Season.

Although the last port prior to San Diego will be outside the Pacific Coast Region (PCR), our request is that we be given the same relief that is extended to vessels that depart from ports within the PCR. Since the ship will have been at sea and well off shore for two days prior to de-ballasting in San Diego, and all ballast exchanges will take place within the geographic confines of the PCR (North of 25N latitude), we feel that this meets the intent and spirit of the regulation. In fact, an intermediate port call within the PCR would introduce more opportunities for Nuisance Invasive Species incidents.

The following is our Alternative Ballast Water Management Plan for consideration:

Miami to San Diego Trans-Panama Canal Cruise

Ballast between:

A) Aruba and Miami between positions 13 35.0N/070 20.0W and 17 06.0N/073 37W in depths varying between 1553 and 4200 meters, distance from land>50 nm; and

B) Puntarenas and Huatulco , between positions 10 00N/086 17.8W and 15 00.0N/095 00.0W in depths varying between 3204 and 3240 meters, distance from land>30 nm

Uptake and exchange Ballast Northbound between:

AA) Puerto Vallarta and Cabo San Lucas between positions 20 44.0 N/109 40.5W and 20 44.0N/106.0W in depths varying between 630 and 1935 meters, distance from land >12 NM; and

BB) Cabo San Lucas and San Diego between positions (ballast exchange)
Lat : 025 deg. - 00min. N; Long: 113deg. - 56.5min. W ; and
Lat : 027 deg. - 40 min. N; Long : 116 deg. - 15 min. W ; and
Lat : 030 deg. - 55 min. N; Long : 117 deg. - 22 min. W.
Distances from land greater than 55NM and water depths between 1650 and 4500 meters.

Please note that we will always look to minimize the quantity by managing other liquid weights to increase overall stability. Regardless of our bunkering port we will not discharge more than 2000 m3 of Ballast Water in the Port of San Diego and the ballast water to be discharged will be exchanged within the "Pacific Coast Region".

Thank you for your consideration and please let me know if you have any questions.

Regards,

Rich Pruitt
Director Environmental and Public Health Programs
Safety & Environment Department
(305) 982-2179 office (305) 539-6478 fax
(305) 495-2845 cellular
1050 Caribbean Way
Miami, FL 33132-2096 USA

EXHIBIT B

Celebrity Cruises

M/V MERCURY

BALLAST WATER MANAGEMENT PLAN

DEFINITIONS

a. Ballast Water: For the purposes of this policy, ballast water is any seawater taken on board the vessel to control or maintain trim, draft, stability or stresses of the ship. Mixtures of seawater ballast with other waters shall be managed to whichever management standard is more stringent.

b. COTP/COTP Zone: The U.S. Coast Guard Captain of the Port and the area under control of the Captain of the Port. See http://www.navcen.uscg.gov/mwv/regulations/33CFR003/33CFR03.htm for coordinates of the COTP zones.

c. EEZ: The U.S. Exclusive Economic Zone (EEZ), also known as the 200-mile limit; is described as that area of water up to 200 miles from the United States as measured from the low water line. Demarcation lines exist at the California/Mexico, Maine/Canada, Washington/Canada, and Alaska/Canada boarders. An EEZ surrounds the Hawaiian Islands, Puerto Rico, and U.S. territories, such as the U.S. Virgin Islands.

d. Ballast water exchange depth: Where the charted depth is equal to or greater than the required depth during the entire track where a ballast water exchange will occur. Some states require ballast water exchange at a specified depth (the U.S. federal law does not).

e. Ballast water exchange:

(1) Replacing ballast water by the following means:

- a complete emptying and refilling (sequential method) of a ballast tank. Discharge shall continue until the pumps lose suction and then, **if fitted**, stripping pumps or ejectors will be used; or
- a flow-through flushing method, defined as where an amount of water equal to at least three times the ballast tank volume is pumped into the tank and then exits the tank through an overboard discharge opening (it can be the same).

f. Ballast water exchange area: That area of water 200 miles or greater from land.

g. Ballast water treatment: It is this Company's policy not to use chemicals, such as chlorine, as a substitute for ballast water management methods. When ballast water treatment equipment becomes available it will be evaluated for inclusion as a possible management method of this policy.

h. Ballast Water Log:

(1) Vessel maintains a Ballast Water Log recording all ballast water uptakes and discharges. This log is maintained by the officer in charge of ballast operations, and countersigned by the Master.
(2) Vessels shall use the Ballast Water Log template provided in this guidance.

i. Pacific Coast Region defined as a 200nm off-shore zone, east of 154 W Longitude and North of 25 N Latitude, exclusive of the Gulf of California.

BALLAST WATER MANAGEMENT STANDARDS - U.S.

a. **Ballast water management:** Follow practices described in Table 1 and as modified by exceptions in Table 2. Ballast water that does not meet discharge standards is retained on board when in port, unless approved otherwise in accordance with local exceptions (i.e. California, Washington, etc.).

Table 1 – Ballast Water Discharge – U.S.	
Situation	**Vessel's actions**
Vessels entering from outside the EEZ	• Retain Ballast Water on Board • Discharge in sea condition (above 12 nm from land) prior to port entry • . Discharge in Port Condition only water from a mid-ocean ballast water exchange. Received outside 200nm from land in waters at least 2000 meters deep. Whenever possible.

Table 2 – Ballast Water Discharge Exceptions – U. S.	
Location	**Vessel entering from inside the Pacific Coast Region**
California port call	• Ballast Water discharged in California ports will have been taken/exchanged at least 50nm from shore and in water at least 200 meters in depth within the Pacific Coast Region (PCR) (California Ballast Water Regulations Revision March 22nd 2006). • Discharge Ballast Water outside California waters (as far as possible offshore but in no case less than 3nm from land)
	Vessel entering from outside the Pacific Coast Region
	• Ballast Water discharged in California ports will have been taken/exchanged at least 200 nm from shore and in waters at least 2000 meters in depth, except as outlined below.
	• Vessel operating on 10 and 11-day Mexican Riviera Cruises o Ballast Water discharged in California ports will have been taken/exchanged at least 55nm from shore and in waters at least 1000 meters in depth.
	• Vessel operating on 14-day Trans-Panama Canal Cruises o Ballast Water discharged in California ports will have been taken/exchanged at least 55nm from shore and in waters at least 1000 meters in depth.

Washington port call	**Prior to July 1, 2007** • Retain ballast on board • Discharge only waters taken up in 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 1, 2007** • Retain ballast on board • Discharge only waters taken up in 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 fines. **NO SAFETY EXEMPTIONS are allowed**. Note: 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.

b. Precautionary practices:

The master, owner operator, or person in charge shall ensure the following practices are carried out to minimize the uptake and release of non-indigenous species.

b.1. Minimizing uptake of harmful aquatic organisms, pathogens and sediments.
When loading ballast, every effort should be made to avoid the uptake of potentially harmful aquatic organisms, pathogens and sediment that may contain such organisms. The uptake of ballast water should be minimized or, where practicable, avoided in areas and situations such as:
- areas identified by the port State in connection with advice relating to 8.2.2 above;
- in darkness when bottom-dwelling organisms may rise up in the water column;
- in very shallow water; or
- where propellers may stir up sediment.

b.2 Removing ballast sediment on a timely basis.
Where practicable, routine cleaning of the ballast tank to remove sediments should be carried out in mid-ocean or under controlled arrangements in port or dry dock, in accordance with the provisions of the ship's ballast water management plan.

b.3 Avoiding unnecessary discharge of ballast water

If it is necessary to take on and discharge ballast water in port to facilitate safe cargo operations, care should be taken to avoid unnecessary discharge of ballast water that has been taken up in another port.

c. Ballast water reporting and submission: As described in Table 3.

Table 3 – Ballast Water Reporting – U.S. & Canada

Situation	Ship Action	Additional Copy To:	Responsible
24 hours prior to entering U.S. port	Submit a Ballast Water Report Form to one of the following: • Via e-mail to nbic@ballastreport.org; or • Via internet to the NBIC at http://invasions.si.edu/ballast.htm; or • Fax to the Commandant, U.S. Coast Guard, c/o the NBIC at 1-301-261-4319; or • Mail to U.S. Coast Guard, c/o Smithsonian Environmental Research Center (SERC), P.O. Box 28, Edgewater, MD 21037-0028.	Western Canada: • Fax to the Vancouver Harbour Master's Office at 1-604-665-9099; or Eastern Canada: • See 33 CFR 151.2041 or Coast Pilot (too many to print here) California: • Fax to the California State Lands Commission at 1-562-499-6444; or • E-mail to bwform@slc.ca.gov Oregon: • Fax to State of Oregon Dept. of Environmental Quality via Merchants Exchange of Portland at 1-503-295-3660; or • E-mail to marine.room@pdxmex.com Washington: • Fax to State of Washington Dept. of Environmental Quality via Marine Exchange of Puget Sound at 1-206-443-8025; or • E-mail to waballast@aol.com	Chief Officer Supported by: Master Staff Captain Env. Officer Chief Eng.
How often?	• One report per voyage is acceptable, however, if the vessel exits and enters the EEZ more than once, a separate report for each event is required.	Canada: • Upon first entry to Vancouver, Harbour Master will board and review ballast water plan. • States may take ballast water and sediment samples.	Chief Officer Supported by: Master Staff Captain Env. Officer Chief Eng.
Records Retention	• Retain copies of reports and Ballast Water Management Plan changes on board	• 3 years, onboard, then discard without report	Chief Officer

BALLAST WATER MANAGEMENT STANDARDS - International

a. Ballast water management: Follow practices described in Table 4. Ballast water that does not meet discharge standards may be retained on board when in port, unless directed otherwise in exceptions.

Table 4 – Ballast Water Discharge – International

Situation	Ship Action	Responsible
Argentina	• If ballast taken where cholera is endemic, dose ballast water tank with chlorine prior to entry to Buenos Aires (other ports not mentioned) • Info. at: http://www.intertanko.com/tankerfacts/environmental/ballast/ballastreq.htm	Chief Officer Supported by: Master Staff Captain Env. Officer Chief Eng.
Australia	• Conduct mid-ocean exchange or meet "low-risk" characteristics • File Quarantine Pre-Arrival Report to AQIS, 12 to 48 hours prior • Info. at: http://www.affa.gov.au/corporate_docs/publications/html/quarantine/ballast_water/index.html	
Bonaire	• Discharge of ballast water in coastal waters is prohibited.	
Chile	• Mid-ocean exchange; or • Dose ballast water tank with chlorine prior to entry (see info. web site for dosage information) • Info. at: http://www.intertanko.com/tankerfacts/environmental/ballast/ballastreq.htm	
Israel	• Complete exchange in Atlantic Ocean; or • Ships bound for Eilat must exchange outside of the Red Sea • Report form required • Info. at: http://www.intertanko.com/tankerfacts/environmental/ballast/ballastreq.htm	
New Zealand	• Mid-ocean exchange • Report form required • Info. at: http://www.intertanko.com/tankerfacts/environmental/ballast/ballastreq.htm	
Panama Canal	• Discharge of ballast water is prohibited.	

BALLAST WATER DOCUMENTATION STANDARDS - All Ports

a. Ballast water record book: Upon ratification of the Annex and certification of the vessel, maintain a Ballast Water Log as described in Table 5.

Table 5 – Ballast Water record book – IMO

Requirement	Ship Action	Retention	Responsible
Each vessel shall maintain a Ballast Water Log	1. Have on board a Ballast Water Log. 2. Record all ballast water management activities by tank.	3 years, onboard, then discard without report	Officer in Charge countersigned by Master

DOCUMENT RETENTION

a. Ballast Water Report forms: will be retained onboard for 3 years.
b. Ballast Water Log: will be retained onboard for 3 years.

RESPONSIBILITY, EMERGENCY EXCEPTION, AND APPLICATION

a. Responsibility: The Master has the overall responsibility for the creation and enforcement of a ship-specific Ballast Water Management Plan and adherence to this policy, assisted by the Staff Captain, Chief Officer, Chief Engineer and Environmental Officer.

(1) The overall responsibility for the oversight of these procedures lies with the Chief Officer/Chief Navigation Officer as monitored by the Environmental Officer, Master/Staff Captain and Chief Engineer.
(2) The Ballast Water Management Plan follows the IMO Resolution A.868 format.
(3) Exceptional circumstances requiring a departure from this policy shall be arranged through consultation with VP Marine Operations and AVP Safety & Environment.

b. Emergency Exception: This policy shall be strictly adhered to except in an emergency when discharge of ballast is required to protect the stability of the ship and the safety of all persons on board. If such a situation occurs, the Master must report this to the VP Marine Operations and AVP, Safety and Environment.

c. Application Worldwide: This policy is mandatory for all voyages to the United States, (including Puerto Rico), Canada, and countries noted in this policy. Every reasonable effort will be made to continue adherence to this policy in other ports worldwide.

TRAINING

a. Ballast water management requirements onboard include: 1) reporting, 2) stability calculations, 3) ship stress calculations and 4) local regulatory requirements. The most common means of administering the training is through self study and training sessions conducted by the Chief Officer.

b. Training is provided to all Bridge Officers, Engine Control Room engineers (2nd Engineers), and is tailored to their needs depending upon their involvement.

c. The Staff Captain and the Navigation Officer Verify that the training was held and the training log has been signed by the participants.

d. The training is scheduled and conducted at the beginning of each contract, at the beginning of a new itinerary as well as on a monthly basis for every involved officer.

BALLAST WATER ARRANGEMENTS

TANK ARRANGEMENT AND TANK CAPACITIES			
TANK	COMPARTMENT	CAPACITY m3	AVAILABLE PUMPS
BW TK 1 FORE PEAK	B1	637.7	B&B no.1 / B&B no.2 / EBP
BW DB TK 2	B2	51.5	B&B no.1 / B&B no.2 / EBP
BW TK 3 P	B14	103.4	B&B no.1 / B&B no.2 / EBP
BW TK 3 S	B15	101.2	B&B no.1 / B&B no.2 / EBP
BW TK 5 P	B6	181.7	B&B no.1 / B&B no.2 / EBP
BW TK 5 S	B7	181.7	B&B no.1 / B&B no.2 / EBP
BW TK 6 P	B100	200.6	B&B no.1 / B&B no.2 / EBP
BW TK 6 S	B101	200.6	B&B no.1 / B&B no.2 / EBP
BW DB 9 P	B12	149.3	B&B no.1 / B&B no.2 / EBP
BW DB 9 S	B13	149.3	B&B no.1 / B&B no.2 / EBP
BW DB 11 P	B32	109.5	B&B no.1 / B&B no.2 / EBP
BW DB 11 S	B33	109.5	B&B no.1 / B&B no.2 / EBP
BW DB 13 P	B68	123.7	B&B no.1 / B&B no.2 / EBP
BW DB 13 S	B69	123.7	B&B no.1 / B&B no.2 / EBP
BWT #16 P	B16	106.1	B&B no.2 / B&B no.3 / EBP
BW DB 16 S	B17	106.1	B&B no.2 / B&B no.3 / EBP
BW TK 17 SKEG	B45	173.5	B&B no.2 / B&B no.3 / EBP
BW TK 17 P GW HOLDING TK	B64	265.9	B&B no.3 / Grey Ballast pump
BW TK 17 S GW HOLDING TK	B65	265.9	B&B no.3 / Grey Ballast pump
BW TK 17 AFT P	B501	200.6	B&B no.2 / B&B no.3 / EBP
BW TK 17 AFT S	B511	201.8	B&B no.2 / B&B no.3 / EBP
BW AFT PEAK 18 P	B50	455.2	B&B no.2 / B&B no.3 / EBP
BW AFT PEAK 18 S	B51	455.2	B&B no.2 / B&B no.3 / EBP
HEELING TANKS			
HW TK 10 S	H25	248.6	Heeling Pump / EBP
HW TK 10 P	H24	248.6	Heeling Pump / EBP

NOTE: THE BILGE & BALLAST PUMP No.3 CAN BE USED ONLY TO DISCHARGE BW
NOTE: BW TK 17 SKEG IS PERMANET FILLED WITH FRESH WATER

PUMP CAPACITY	
BALLAST PUMPS	CAPACITY
Bilge, Ballast & Trim Pump no.1	210 m3/hr
Bilge & Ballast Pump no.2	210 m3/hr
Bilge & Ballast Pump no.3	210 m3/hr
Emergency Bilge & Ballast Pump (EBP)	210 m3/hr
Heeling Pump	210 m3/hr
Grey Water & Ballast Pump	100 m3/hr

SHIP SPECIFIC ITINERARY

SPECIFIC BALLAST MANAGEMENT PLAN 15-NIGHT PANAMA CANAL NORTHBOUND 2006-07				
DAY	**PORT**	**ARRIVAL**	**DEPARTURE**	**ACTIONS PLANNED**
0	MIAMI	7:00 AM	5:00 PM	Deballast BW in order to bunker IFO and FW.
1	AT SEA			**RETAIN BALLAST ON BOARD**
2	AT SEA			When the vessel is more than 50 nm from land, between positions: LAT: 13 35.0N LONG: 070 20.0W to LAT: 17 06.0N LONG:15 00.0N, take on ballast.
3	ARUBA	9:00 AM	11:00 PM	Deballast tanks in order to bunker IFO and FW.
4	CURACAO	7:00 AM	6:00 PM	Deballast tanks in order to bunker IFO and FW.
5	AT SEA			Discharge BW tanks needed in order to meet the regulations for passing the Panama Canal and have IFO bunkering at Fuerte Amador , distance from land greater than 12 nm.
6	PANAMA CANAL	6:00 AM	4:00 PM	**RETAIN BALLAST ON BOARD.** Possibility of deballasting tanks at the Special Anchorage of Fuerte Amador as much BW as needed in order to bunker IFO and FW.
7	AT SEA			**RETAIN BALLAST ON BOARD**
8	PUNTARENAS	7:00 AM	7:00 PM	**RETAIN BALLAST ON BOARD**
9	AT SEA			Depending on potable water remaining onboard, will ballast tanks between positions : LAT: 10 00.0N LONG: 086 17.8W and LAT: 15 00.0N LONG: 095 00.0W in depths varying between 3204 to 3240 metres and distance from land greater than 12 NM.
10	HUATULCO	12:00 PM	7:00 PM	**RETAIN BALLAST ON BOARD**
11	ACAPULCO	10:00 AM	5:00 PM	**RETAIN BALLAST ON BOARD**
12	AT SEA			**RETAIN BALLAST ONBOARD**
13	PUERTO VALLARTA	07:00 AM	4:00 PM	Discharge as much BW as needed in order to receive full FW bunkers.
14	CABO SAN LUCAS	7:00 AM	3:30 PM	**RETAIN BALLAST ON BOARD**
15	AT SEA			Perform Ballast water exchange for all BW tanks between positions LAT: 25 00.0N LONG: 113 56.5W, LAT: 27 40.0N LONG: 116 15W and LAT: 30 55N LONG: 117 22.0W, distance from land greater than50 nm and depths varying between 1650 and 4500 meters. Tanks and volumes as follow: FPT 150m3, BWT #2 50m3, BWT #3(P&S) 205m3, BWT #6 (P&S) 400m3, APT 18 (P&S) 910m3. NOTE: BWT #5 (P&S) and BWT #16 (P&S) will be discharged and remain empty.
16	SAN DIEGO	7:00 AM	5:00 PM	Discharge Sea Water Ballast as needed for Fuel Oil Bunkering, Diesel Oil Bunkering and potable water bunkering. The amount of BW discharged will not exceed 2000 m3.

SHIP SPECIFIC ITINERARY

SPECIFIC BALLAST MANAGEMENT PLAN 11 NIGHTS MEXICAN RIVIERA (2) 2006-07				
DAY	**PORT**	**ARRIVAL**	**DEPARTURE**	**ACTIONS PLANNED**
0	**SAN DIEGO**		05:00 PM	**Discharge Sea Water Ballast as needed for Fuel Oil Bunkering, Diesel Oil Bunkering and potable water bunkering.**
1	AT SEA			Start Ballasting the APT 18(P 200 m3 S 200 m3) when the Vessel is 12 nm from land inside the Pacific Coast Region. When the vessel will be between Lat: 28° 04'N Long: 115° 41'W and Lat: 23°12'N Long: 110° 24' W will continue ballasting the BWT 2 up to full 51.5 m3, BWT 3(P+S) up to full total both tanks 204.6 m3, BWT 6(P+S) up to full total both tanks 401.2 m3.
2	CABO SAN LUCAS	09:00 AM	06:00 PM	**In Port the Vessel will retain Ballast on Board.** On the way to Mazatlan and while in sea condition above 12 nm from land, will ballast the FPT 100 m3 and the APT 18 (P+S) up to full total both tanks 910.4 m3.
3	**MAZATLAN**	07:00 AM	05:00 PM	In port Mazatlan in order for the vessel to receive potable water, will empty Sea Water Ballast from BWT 3(P+S) and from APT 18 (P+S) will discharge approximately (255.2m3) from each tank. Remaining in the APT (P+S) (200m3+200m3).
4	**PUERTO VALLARTA**	07:00 AM	05:00 PM	On the way to Puerto Vallarta and while in sea condition above 12 nm from land the vessel will ballast BWT 3(P+S) up to full total both tanks 204.6 m3, and the APT 18 (P+S) up to full total both tanks 910.4 m3. **In order for the vessel to receive potable water,** will empty 100 m3 from the FPT, BWT 3(P+S). From APT 18 (P+S) will discharge approximately (255.2m3) from each tank. Remaining in the APT (P+S) (200m3+200m3).
5	AT SEA			On the way to Acapulco and while at sea condition above 12 nm from land ,will ballast the BWT 3(P+S) up to full total both tanks 204.6 m3, and the APT 18 (P+S) up to full total both tanks 910.4 m3.
6	**ACAPULCO**	07:00 AM	11:00 PM	**RETAIN BALLAST ON BOARD**
7	ZIHUATANEJO	07:00 AM	05:00 PM	On the way to Zihuatanejo and while at sea condition above 12 nm from land, will ballast 150 m3 in the FPT. On the way to Manzanillo and while at sea condition above 12 nm from land will ballast BWT 5(P+S) up to full total in both tanks 363.4 m3, and BWT 16 (P+S) up to full, total in both tanks 212.2 m3.
8	**MANZANILLO**	07:00 AM	05:00 PM	**RETAIN BALLAST ON BOARD**
9	AT SEA			When the Vessel will reach the Position Lat: 25° 00' N Long: 113° 56.5' W will start ballast water exchange. Tanks to be exchanged FPT 150 m3, BWT 250.5m3 BWT 3(P+S) 204.6 m3, BWT 6(P+S) 401.2 m3, APT 18(P+S) 910.4 m3. **NOTE:** The BWT 5(P+S) and BWT 16 (P+S) will be discharged and will remain empty.
10	AT SEA			Ballast exchange will be continued until Lat: 30° 55' N Long: 117° 22' W.
11	**SAN DIEGO**	07:00 AM	05:00 PM	**Discharge Sea Water Ballast as needed for Fuel Oil Bunkering, Diesel Oil Bunkering and potable water bunkering.**

SPECIFIC BALLAST MANAGEMENT PLAN
10 NIGHTS MEXICAN RIVIERA (2) 2006-07

DAY	PORT	ARRIVAL	DEPARTURE	ACTIONS PLANNED
0	SAN DIEGO		05:00 PM	Discharge Sea Water Ballast as needed for Fuel Oil Bunkering, Diesel Oil Bunkering and potable water bunkering.
1	AT SEA			Start Ballasting the APT 18(P 200 m3 S 200 m3) when the Vessel is 12 nm from land inside the Pacific Coast Region. When the vessel will be between Lat: 28° 04'N Long: 115° 41'W and Lat: 23°12'N Long: 110° 24' W will continue Ballasting the BWT 2 up to full 51.5m3, BWT 3(P+S) up to full total both tanks 204.6 m3, BWT 6(P+S) up to full total both tanks 401.2 m3.
2	CABO SAN LUCAS	09:00 AM	06:00 PM	**In Port the Vessel will Retain Ballast on Board.** On the way to Mazatlan and while in sea condition above 12 nm from land, will Ballast the FPT 100 m3 and the APT 18 (P+S) up to full total, both tanks 910.4 m3.
3	MAZATLAN	07:00 AM	05:00 PM	In the Port of Mazatlan in order for the vessel to receive potable water, will empty Sea Ballast Water from BWT 3(P+S) and from APT 18 (P+S) will discharge approximately (255.2m3) from each tank. Remaining in the APT (P+S) (200m3+200m3).
4	AT SEA			On the way to Acapulco and while at sea condition above 12 nm from land ,will Ballast the BWT 3(P+S) up to full total both tanks 204.6 m3, and the APT 18 (P+S) up to full total both tanks 910.4 m3.
5	ACAPULCO	07:00 AM	11:00 PM	**RETAIN BALLAST ON BOARD**
6	ZIHUATANEJO	07:00 AM	02:00 PM	On the way to Zihuatanejo and while in sea condition above 12 nm from land, will ballast 50m3 more in the FPT so total in the FPT 150 m3, and BWT 16 (P+S) up to full, total in both tanks 212.2 m3.
7	PUERTO VALLARTA	09:30 AM	07:00 PM	In Puerto Vallarta in order for the vessel to receive potable water, will discharge 310.4 m3 from the APT 18(P+S), remaining in the APT 18 (P+S) 300 m3 on each tank.
8	AT SEA			When the vessel reaches position Lat: 25° 00' N Long: 113° 56.5' W will start ballast water exchange. Tanks to be exchanged FPT 150 m3, BWT 2 50.5m3, BWT 3(P+S) 204.6 m3, BWT 6(P+S) 401.2 m3, APT 18(P+S) 910.4 m3. **NOTE:** The BWT 5(P+S) and BWT 16 (P+S) will be discharged and will remain empty.
9	AT SEA			Ballast exchange will be continued until Lat: 30° 55' N Long: 117° 22' W.
10	SAN DIEGO	07:00 AM	05:00 PM	Discharge Sea Water Ballast as needed for Fuel Oil Bunkering, Diesel Oil Bunkering and potable water bunkering.