



## **SUPPLEMENTAL REPORT OF THE 2005 BUDGET ACT**

### **CRUISE SHIP AND OCEAN-GOING VESSEL WASTE DISCHARGE PROGRAM**

**Item 3940-001-0001**

**June 2007**



**STATE WATER RESOURCES CONTROL BOARD  
REGIONAL WATER QUALITY CONTROL BOARDS**

## EXECUTIVE SUMMARY

Pursuant to Public Resources Code (PRC) 72300 et seq., Cal/EPA convened the Cruise Ship Environmental Task Force (Task Force) in 2000. The Task Force was charged with evaluating environmental practices and waste streams of cruise ships. It gathered information from the cruise ship industry and submitted this information with recommendations related to water quality protection in a report to the Legislature in August 2003.

Based on the Task Force recommendations, the Legislature enacted a series of new laws in 2003 and 2004 to regulate various discharges of wastes to state marine waters from cruise ships. The laws are summarized as follows:

- Chapter 488, Statutes of 2003, AB 121 (Simitian):  
Prohibited the release of oily bilge water and sewage sludge from cruise ships into the marine waters of the state and marine sanctuaries. The law required the State Water Resources Control Board (State Water Board), if it determined necessary, to apply to the appropriate federal agencies to provide the state the authority to issue the prohibition on sewage sludge.
- Chapter 494, Statutes of 2003, AB 906 (Nakano):  
Prohibited owners/operators of cruise ships from releasing hazardous waste or other waste (i.e., wastes from photo-developing, dry cleaning, or medical wastes) into state marine waters and marine sanctuaries.
- Chapter 710, Statutes of 2004, AB 2093 (Nakano):  
Prohibited cruise ships from releasing graywater into the state's marine waters. (graywater is drainage from dishwasher, shower, laundry, bath, and washbasin drains, but does not include drainage from toilets, urinals, hospitals, or cargo spaces).
- Chapter 764, Statutes of 2004, AB 2672 (Simitian):  
Prohibited cruise ships, until January 1, 2010, from discharging sewage into the marine waters of the state, upon federal approval of the State Water Board's application or if the State Water Board determines that federal approval is not required.

In July 2005, the Legislative Analyst Office issued the *Supplemental Report of the 2005 Budget Act* which states:

“No later than January 10, 2006, the State Water Resources Control Board shall submit a report to the Legislature on its plan to implement a program to regulate cruise ship waste discharges, pursuant to Chapter 710, Statutes of 2004, AB 2093 (Nakano), and Chapter 764, Statutes of 2004, AB 2672 (Simitian). The report should address the funding needs and staffing levels required for an effective regulatory program, including coordination with the State Lands Commission's Ballast Water Management Program and other state and federal agencies with jurisdiction relevant to this subject area. If the state is unable to gain approval from the United States Environmental Protection Agency to regulate these discharge activities, the report shall include suggested law changes that would be needed to eliminate the discharge of graywater and sewage sludge into state waters from cruise ships.”

In October 2005, the Legislature enacted the “California Clean Coast Act of 2005,” Chapter 588, Statutes of 2005, SB 771 (Simitian), which amended PRC sections 72400-72442,

consolidating all the cruise ship laws, and extending those laws to oceangoing vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for graywater and sewage. The California Clean Coast Act became effective on January 1, 2006.

The State Water Board is submitting this Supplemental Report to the Legislature in accordance with the requirements of the 2005 Budget Act. This report provides the background for regulation of cruise ships and how those regulations were extended to other large oceangoing vessels. It also includes discussion of how the State Water Board plans to incorporate regulation of oceangoing vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater in addition to cruise ships.

### **Recommendations:**

The State Water Board needs to implement a compliance and enforcement program to ensure that cruise ships and other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater are in compliance with the established laws. State Water Board program implementation will involve the following activities:

- (1) Work with the U.S. EPA to obtain its approval of a prohibition on the discharge of sewage and sewage sludge from cruise ships and other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage, to state marine waters.
- (2) Work with the National Oceanic and Atmospheric Administration (NOAA) so that it issues a prohibition on discharges of sewage sludge, sewage, hazardous waste, other waste, graywater, and oily bilgewater from cruise ships and other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater, within California's four National Marine Sanctuaries.
- (3) If resources are augmented, provide outreach to, guidance to, and coordination with dischargers and other regulatory agencies as necessary for the timely submission and collection of accurate release reports of sewage, sewage sludge, oily bilgewater, hazardous waste, other waste, and graywater from cruise ships and other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater.
- (4) If resources are augmented, review release reports from cruise ships and other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater.
- (5) If resources are augmented, develop a program to inspect cruise ships and other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater, to ensure compliance with discharge prohibitions.
- (6) If resources are augmented, implement a program to enforce the oily bilgewater, hazardous waste, other waste, and graywater discharge prohibitions by conducting informal enforcement actions and making enforcement recommendations to the State Attorney General. Examples of informal enforcement actions are Notice of Violation letters, requests for additional information under California Water Code section 13267, and verbal notification. For formal enforcement actions, State Water Board staff will prepare letters of recommendation for civil penalties addressed to the State Attorney

General; staff will also assist the latter for any information needs. The program will be expanded to include enforcement of unlawful discharges of sewage and sewage sludge if U.S. EPA approves the State Water Board's application to prohibit discharges of sewage and sewage sludge from cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage.

## INTRODUCTION

The Supplemental Report of the 2005 Budget Act requires that the State Water Resources Control Board (State Water Board) submit to the Legislature, no later than January 10, 2006, "a report on its plan to implement a program to regulate cruise ship waste discharges, pursuant to Chapter 710, Statutes of 2004, AB 2093 (Nakano), and Chapter 764, Statutes of 2004, AB 2672 (Simitian)." The report must address the following:

1. Funding needs and staffing levels required for an effective regulatory program, including coordination with the State Lands Commission's Ballast Water Management Program and other state and federal agencies with jurisdiction relevant to this subject area.
2. Suggested law changes that would be needed to eliminate the discharge of sewage and sewage sludge into state waters from cruise ships, if the state is unable to gain approval from the U.S. Environmental Protection Agency (U.S. EPA) to regulate these discharge activities.

SB 771 (Simitian), Chapter 588, Statutes of 2005 consolidated all the cruise ship laws and expanded their prohibitions to other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater.

This report addresses all the policy issues described in the cruise ship and ocean-going vessel (300 gross tons or more with sufficient holding tank capacity for sewage and graywater) regulations, and supplemental requirements of the 2005 Budget Act. This report also provides recommendations to implement a compliance and enforcement program for both types of vessels: cruise ship and other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater.

### **The Cruise Ship Environmental Task Force**

Pursuant to Public Resources Code (PRC) 72300 et seq., Cal/EPA convened the Cruise Ship Environmental Task Force (Task Force) in 2000. The Task Force was charged with evaluating environmental practices and waste streams of cruise ships. It gathered information from the cruise industry and submitted this information with recommendations in a report to the Legislature in August 2003.

Three relevant Task Force findings, as described in its 2003 report titled Regulation of Large Passenger Vessels in California, were as follows:

- (1) Cruise ships generate considerable quantities of sewage, graywater (wastewater from kitchens, showers, laundry, etc.), ballast water, and other wastes;
- (2) Although many such vessels have installed marine sanitation devices (MSDs), failure to meet current federal standards for the discharge of effluent is common; and
- (3) There are no regular monitoring requirements for vessels in California's coastal waters.

These concerns and related considerations led the Task Force to formulate a list of recommendations; among them:

- (1) Amend the federal Clean Water Act (CWA) to allow California to establish a statewide discharge prohibition zone for sewage discharges from cruise ships only.
- (2) Graywater should be required to meet the same standards required of MSD effluent or discharge should be withheld while in state waters.
- (3) Wastewater discharges should be prohibited in California's National Marine Sanctuaries.
- (4) No discharge of any waste, food, or otherwise macerated waste into any marine sanctuary within California coastal waters.

### **Cruise Ship Legislation**

To address the issues raised in the Task Force report, the Legislature enacted a series of new laws in 2003 and 2004 to regulate various discharges of wastes from cruise ships. The major provisions of these laws are summarized below:

#### *Chapter 488, Statutes of 2003, AB 121(Simitian):*

- (1) The State Water Board is directed to determine whether it is necessary to apply for federal permission to prohibit the discharge of sewage sludge from cruise ships into state waters. Upon determining that this is necessary, the State Water Board must submit an application seeking authority to impose this prohibition to U.S. EPA under specified provisions of CWA.
- (2) Upon federal approval, or if the State Water Board determines that an application is not necessary, cruise ships are prohibited from discharging sewage sludge into the marine waters of the state or National Marine Sanctuaries.
- (3) Cruise ships are prohibited from discharging oily bilgewater into the marine waters of the state or National Marine Sanctuaries.
- (4) Releases of either sewage sludge or oily bilgewater from cruise ships must be reported to the State Water Board within 24 hours of occurrence.
- (5) Violations of the discharge prohibitions set forth in (2) and (3) above are subject to civil penalties of not more than \$25,000 for each violation.
- (6) The State Water Board shall request that the appropriate federal agencies prohibit the discharge of sewage sludge and oily bilgewater from cruise ships into the non-state waters within the four National Marine Sanctuaries off California's coast.

#### *Chapter 494, Statutes of 2003, AB 906 (Nakano):*

- (1) Discharges of either hazardous waste or "other waste" (i.e., wastes from photo-developing, dry cleaning, or medical wastes) from cruise ships are prohibited within state waters or a marine sanctuary.
- (2) Discharges of the above-mentioned wastes must be reported to the State Water Board within 24 hours of occurrence.

- (3) The State Water Board must request that the appropriate federal agencies prohibit the discharge of hazardous waste and "other waste" within National Marine Sanctuaries off California's coast.
- (4) Violations of the discharge prohibitions set forth in (1), above, are subject to civil penalties of up to \$25,000 for each violation.

*Chapter 710, Statutes of 2004, AB 2093, (Nakano):*

- (1) Cruise ships are prohibited from releasing graywater into state waters.
- (2) Cruise ships are required to report releases of graywater, hazardous waste, and "other waste" into the marine waters of the state or a National Marine Sanctuary no later than 24 hours after the release to the State Water Board.
- (3) Each violation of the discharge prohibition is subject to a civil penalty of up to \$25,000.

*Chapter 764, Statutes of 2004, AB 2672 (Simitian):*

- (1) The State Water Board is directed to determine whether it is necessary to apply for permission to prohibit the discharge of sewage from cruise ships into state waters or National Marine Sanctuaries. Upon determining that this is necessary, the State Water Board must submit an application seeking authority to impose this prohibition to U.S. EPA.
- (2) Upon federal approval or if the State Water Board determines that federal approval is not required, cruise ships are prohibited from discharging sewage into the marine waters of the state until January 1, 2010.
- (3) States the Legislature's intent to request the Congress of the United States to amend CWA to provide California with authority to regulate sewage discharges from cruise ships within state waters in a manner similar to that granted to the State of Alaska via Public Law 106-554.
- (4) Releases of sewage into state waters or National Marine Sanctuaries must be reported to the State Water Board within 24 hours of release.
- (5) Each violation of the sewage discharge prohibition is subject to a civil penalty for an amount not to exceed \$25,000.

### **Other Ocean-Going Vessel Legislation**

SB 771 consolidated all the cruise ship laws and extended the cruise ship regulations to other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater.

*Chapter 588, Statutes of 2005 "California Clean Coast Act of 2005", (SB 771) (Simitian),:*

- (1) Prohibits the release of hazardous waste, other waste, and oily bilgewater from cruise ships and oceangoing vessels that weigh 300 gross tons or more into the marine waters of the state and marine sanctuaries.

- (2) Prohibits the release of sewage sludge from cruise ships and oceangoing vessels into marine waters of the state and marine sanctuaries; and prohibits the release of sewage from cruise ships and oceangoing vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage into the marine waters of the state<sup>1</sup>..
- (3) Prohibits the release of graywater from cruise ships and oceangoing vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for graywater into the marine waters of the state.
- (4) Directs the State Water Board, if deemed necessary, to obtain permission from U.S. EPA to prohibit sewage sludge releases from cruise ships and oceangoing vessels and sewage discharges from cruise ships and oceangoing vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage in state waters.
- (5) Directs the State Water Board to request the appropriate federal agencies to issue similar prohibitions in the four National Marine Sanctuaries in California.
- (6) Requires the master, owner, operator, agent, or person in charge of an oceangoing ship who has operated in the marine waters of the state in 2006 to provide certain information relating to ports of call, graywater and blackwater discharge (blackwater discharges are human body wastes and the wastes from toilets and other receptacles intended to receive or retain body waste), and holding tank capacities to SLC upon the vessel's departure from its first port or place of call in California beginning in 2006; requires SLC to submit the information to the State Water Board on or before February 1, 2007.
- (7) Requires the State Water Board to submit the information to the Legislature on or before October 1, 2007.

### **Sewage Discharge Prohibitions under CWA Section 312(f)(4)**

Federal law prohibits states from regulating sewage discharges from vessels, with some exceptions. Under CWA section 312(f)(4), a state or local authority that has determined that some or all state waters require greater environmental protection must submit an application to the Administrator of U.S. EPA to prohibit sewage discharges. Based on the application, the Administrator must make a determination within 90 days whether the subject waters have sufficient coastal and marine resources to warrant protection from vessel discharges of sewage.

Section 72440 of PRC offers the State Water Board two options: (1) if it determines that applying for this authority under CWA is not necessary, it may proceed to enforce a discharge prohibition of sewage or sewage sludge into state marine waters from cruise ships and oceangoing vessels that weigh 300 gross tons or more and have sufficient holding tank capacity; or sewage sludge into marine sanctuaries from cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity, or (2) if it determines that an application is necessary, the State Water Board is directed to apply to U.S. EPA for this authority under CWA section 312(f).

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<sup>1</sup> These prohibitions do not go into effect, however, until approved by U.S. EPA.



## **STATE WATER BOARD CRUISE SHIP AND OCEAN-GOING VESSEL WASTE DISCHARGE PROGRAM**

Under the existing Porter-Cologne Water Quality Control Act (Water Code section 13000 et. seq.), the State Water Board is responsible for formulating and implementing a state program to protect the beneficial uses of the waters of the state. State waters include marine waters out to three nautical miles offshore. The State Water Board is also the state agency authorized to implement the requirements of the federal CWA. One of the ways the State Water Board and the nine Regional Water Quality Control Boards (Regional Water Boards) regulate waste discharges to the state's marine waters is through issuance of waste discharge requirements (WDRs). WDRs for discharges to surface waters also serve as National Pollutant Discharge Elimination System (NPDES) permits and implement requirements of CWA and plans and policies adopted pursuant to the California Water Code.

The State Water Board reviewed its options and determined that it was indeed necessary to submit an application for U.S. EPA to issue a prohibition of sewage and sewage sludge discharges to state marine waters from cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity. State Water Board staff has submitted the discharge prohibition application under CWA 312 (f)(4) to U.S. EPA. In accordance with the statutes, the State Water Board has also requested the National Oceanic and Atmospheric Administration (NOAA) to issue similar prohibitions of vessel waste discharges into the four National Marine Sanctuaries in California. These are the Cordell Bank, Gulf of the Farallones, Monterey Bay, and Channel Islands National Marine Sanctuaries. U.S. EPA's and NOAA's actions are pending.

### **Implementation**

The State Water Board needs to implement a compliance and enforcement program to ensure that cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater are in compliance with the discharge prohibitions for graywater, hazardous wastes, other wastes, and oily bilgewater. These programs will be expanded to include the regulation of discharges of sewage and sewage sludge if U.S. EPA approves the State Water Board's application. These programs will also ensure that cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater are in compliance with the law that requires reporting of any release of these wastes.

The State Water Board's implementation program includes the following activities:

- **Follow Up Discharge Prohibition Application and National Marine Sanctuary Prohibitions.** Continue to follow up with U.S. EPA in its determination, so that it issues a prohibition of the discharge of sewage and sewage sludge from cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage, as required by Chapter 588, Statutes of 2005 (SB 771). In addition, the State Water Board will continue to follow up with NOAA so that it prohibits discharges of sewage sludge, sewage, hazardous waste, other waste, graywater, and oily bilgewater from cruise ships and ocean-going vessels that weigh 300 gross tons or

more and have sufficient holding tank capacity for sewage and graywater, within the protected waters of California's four National Marine Sanctuaries.

- **Release Report Review.** Collect and review reports of releases of sewage sludge, sewage, oily bilgewater, hazardous wastes, other wastes, and graywater.
- **Enforcement.** As feasible given the resources provided, enforce discharge prohibitions.

## **Funding Needs**

The State Water Board was allocated 1 PY to prepare the application for federal approval of the state discharge prohibition for cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity, and to implement the Release Report Review and Enforcement programs. Although the PY allocation was provided for implementation of the cruise ship program only, SB 771 had been enacted by the time the State Water Board sent the application to U.S. EPA. Therefore, ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity were included in the application. Table 1 provides the activities that would be conducted by the 1 PY during FY 2008-09.

The State Water Board is waiting to hear from U.S. EPA regarding its CWA 312 (f)(4) application for a no discharge zone for sewage and sewage sludge from cruise ships and ocean-going vessels. A decision by U.S. EPA on the application is expected in 2008 and the conditions of U.S. EPA approval, if they do approve the application, will provide the State Water Board with a better understanding of the resource needs. However, at this time, it is estimated that the State Water Board would need an additional \$200,000 for contract services and a total of \$650,000 and 5 PY to establish an effective regulatory program. This would consist of an increase of 1 PY at the State Water Board, in addition to the 1 PY currently authorized, to implement a compliance and enforcement program for both cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity. Table 2 provides a summary of the tasks that would be covered by these additional resources.

In addition, staff estimated that the State Water Board will need 3 PYs for the San Francisco Bay, Los Angeles, and San Diego Regional Water Boards to implement the compliance and enforcement program for cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity in their respective regions. Table 3 provides a summary of the tasks that would be covered by these additional resources.

### **A. Release Report Review**

The law requires that cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity report to the State Water Board any releases of sewage sludge, sewage, oily bilgewater, hazardous waste, other waste, or graywater into waters of the state or a National Marine Sanctuary. As shown in Table 1, staff estimated that 500 spill reports would be received annually. The release report must include at a minimum the following information:

- Date of the release.
- Time of the release.
- Location of the release.
- Volume of the release.
- Source of the release.
- Remedial actions taken to prevent future releases.

Experience with other regulatory programs has shown that outreach and guidance are necessary in order to facilitate required reporting. For example, the State Water Board's storm water program has developed specific guidance for different types of dischargers, such as industrial, construction, and municipal storm water dischargers. Without adequate outreach and guidance, dischargers are likely to submit incomplete reports, fail to report entirely, or report information in an array of different formats, making review time consuming. Therefore, the Release Report Review portion of this implementation program will include (1) Outreach and Guidance, and (2) Review of Release Reports. Specific details and staffing requirements for these two necessary components are described below.

1. *Outreach and Guidance.* State Water Board staff time is required to develop and circulate guidance materials on waste management options for cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity. In addition to these materials, the State Water Board will develop a form for reporting of releases from cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity.

In order to develop relevant guidance materials, staff will need to coordinate with the Regional Water Boards and other federal, state, and local authorities with overlapping or complementary jurisdictions, such as the United States Coast Guard, Governor's Office of Emergency Services, SLC, Department of Fish and Game, port authorities, and NOAA. Without such coordination, cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity will be required to determine release reporting requirements for each agency and submit different reports. Such overlap could cause confusion and may result in duplicate reporting and frequent misreporting.

Staff resources will also be necessary to provide ongoing discharger guidance and coordination. As provided in Table 1, the 1 PY allocated to the State Water Board does not include staffing for discharger guidance and coordination. It is estimated that an average of eight hours per week will be required for outreach and guidance. The eight hours per week translate to approximately 0.2 PY of additional resources. Tables 2 and 3 summarize the projected additional resources necessary for implementation of the inspection and enforcement program for cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity.

2. *Review of Release Reports.* Staff estimated that 500 release reports will be submitted to the Water Boards annually. Regional Water Board staff time is required to receive the reports, review each report, and make determinations as to whether follow-up actions are necessary. Staff estimated that each report review will require an average of 1.7 hours. Table 3 provides estimates of the staff time required to complete this task.

Release report review will also include a determination of past violations. This will require use of a tracking database which currently does not exist. Determination of past violations will be an essential component in the review process, especially when making decisions regarding the necessity for further action, i.e., follow up and/or recommendation for enforcement action. A centralized electronic reporting database is necessary for the determination of violations for enforcement and could also be used to produce automatic notification to other regulatory agencies, encouraging coordination and consistency in reporting. The database would also be necessary for storing general information and release reports for each cruise ship and ocean-going vessel that weighs 300 gross tons or more and has sufficient holding tank capacity.

The 1 PY that the State Water Board received for the implementation of the cruise ship laws does not include resources for the development and maintenance of a database for releases of cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity. To implement such a database, the State Water Board would need to develop or modify an existing database of release reports for cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity. Staff estimated that approximately \$200,000 will be required for a contractor to develop the database, and 0.2 PY will be required thereafter for system maintenance. Table 2 summarizes the staff required to develop and maintain the electronic reporting database system. Without this database system, it will be very difficult, if not impossible, to manage the collected information in a meaningful manner.

## **B. Enforcement**

Enforcement activities will include information gathering, periodic inspections, and informal enforcement actions and formal enforcement recommendations. The existing 1 PY does not include resources for a regular inspection program or resources for providing technical support to the State Attorney General for formal enforcement cases. Inspections and field presence are essential components of any regulatory program. Therefore, the enforcement portion of this implementation program will include the: (1) Inspection Program, and (2) Enforcement. Specific details and staffing requirements for these two necessary components are described below.

1. *Inspection Program.* Leading an inspection and enforcement program for cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity would take a considerable amount of time in staff training and on-going time to conduct the program. Program staff would need to learn about the complex international, federal, and state legal issues inherent in regulating cruise ships and ocean-going vessels engaged in international commerce. Staff would need to learn about problems unique to shipboard waste handling and pollution prevention equipment. Staff would need to schedule inspections when the ship is in port. Cruise ships are usually in port for only six to eight hours at a time. Commercial vessels also do not stay in port that long since they make profit making deliveries. Staff would be required to set up and populate a database to contain the inspection findings. As shown in Table 2, staff estimated that additional 0.4 PY at the State Water Board would be required to implement this on-going program. As also shown in Table 3, staff

estimated that 1.4 PYs would be needed at the San Francisco Bay, Los Angeles, and San Diego Regional Water Boards to implement this program.

2. *Enforcement.* Staff estimated that the 500 release reports will generate 400 informal enforcement actions and 100 formal enforcement recommendation letters. Examples of informal enforcement actions are Notice of Violation letters, requests for additional information under section 13267 of the California Water Code, and verbal notification. On average, informal enforcement actions will require approximately 5.75 hours each. For formal enforcement recommendations, State Water Board staff will prepare letters of recommendation for civil penalties, addressed to the State Attorney General. Recommendation letters for civil penalties will include a violation history summary and, on average, will require approximately 30 hours each. As shown in Table 2, staff estimated that 0.3 PY will be needed at the State Water Board for informal enforcement actions and formal enforcement recommendations. In addition, 0.3 PY will be needed to oversee and implement the inspection program. As shown in Table 3, a total of 1 PY each is needed at the San Francisco Bay, Los Angeles, and San Diego Regional Water Boards to implement the compliance and enforcement program.

Staff estimated that all of the 100 formal enforcement recommendations per year will result in State Attorney General imposition of civil penalties. In these cases, significant staff resources will be necessary to support the Office of Chief Counsel and the State Attorney General. Experience with other enforcement programs suggests that the resources necessary to provide this support will be approximately 0.3 PY at the State Water Board and 1.4 PY at the San Francisco Bay, Los Angeles, and San Diego Regional Water Boards. Tables 2 and 3 summarize the staff required to support the State Attorney General in formal enforcement actions.

## **Suggested Law Changes**

In the event that U.S. EPA rejects the CWA 312 (f)(4) no discharge zone application, PRC section 72401 provides that the Legislature intends to request the Congress to amend the Federal Water Pollution Control Act (33 U.S.C. Sec. 1251 and following) to provide California with authority similar to that granted to the State of Alaska by Public Law 106-554, to regulate the release of sewage (and sewage sludge) from cruise ships and oceangoing vessels (300 gross tons or more that have sufficient holding tank capacity for sewage) in the marine waters of the state. In that event, the State Water Board will work through appropriate protocols to coordinate with staff of California's congressional delegation in preparing and submitting the proposed CWA amendment to the Congress. In addition pursuant to the Clean Coast Act of 2005, the State Water Board has prepared a report on oceangoing vessel surveyed information and has recommended additional legislative changes.

## **Recommendations:**

The State Water Board needs to implement a compliance and enforcement program to ensure that cruise ships and other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater are in compliance with the established laws. State Water Board program implementation will involve the following activities:

- (1) Work with the U.S. EPA to obtain its approval of a prohibition on the discharge of sewage and sewage sludge from cruise ships and other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater, to state marine waters.
- (2) Work with the National Oceanic and Atmospheric Administration (NOAA) so that it issues a prohibition on discharges of sewage sludge, sewage, hazardous waste, other waste, graywater, and oily bilgewater from cruise ships and other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater, within California's four National Marine Sanctuaries.
- (3) If resources are augmented, provide outreach to, guidance to, and coordination with dischargers and other regulatory agencies as necessary for the timely submission and collection of accurate release reports of sewage, sewage sludge, oily bilgewater, hazardous waste, other waste, and graywater from cruise ships and other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater.
- (4) If resources are augmented, review release reports from cruise ships and other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater.
- (5) If resources are augmented, develop a program to inspect cruise ships and other ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater, to ensure compliance with discharge prohibitions.
- (6) If resources are augmented, implement a program to enforce the oily bilgewater, hazardous waste, other waste, and graywater discharge prohibitions by conducting informal enforcement actions and making enforcement recommendations to the State Attorney General. Examples of informal enforcement actions are Notice of Violation letters, requests for additional information under California Water Code section 13267, and verbal notification. For formal enforcement actions, State Water Board staff will prepare letters of recommendation for civil penalties addressed to the State Attorney General; staff will also assist the latter for any information needs. The program will be expanded to include enforcement of unlawful discharges of sewage and sewage sludge if U.S. EPA approves the State Water Board's application to prohibit discharges of sewage and sewage sludge from cruise ships and ocean-going vessels that weigh 300 gross tons or more and have sufficient holding tank capacity for sewage and graywater.

**Cruise Ship Waste Discharge  
Program Report**

**Table 1. Cruise Ship and Ocean-Going Vessel Legislation Funded Workload Matrix**

<b>State Water Resources Control Board</b>				
<b>Current FY and Subsequent FYs</b>				
<b>PY(s) Requested</b>	<b>Workload</b>	<b>Workload Standard</b>	<b>Basis for Standard</b>	<b>Staff Classification</b>
1 PY	<ul style="list-style-type: none"> <li>▪ Follow up with U.S. EPA for approval of state prohibition, and NOAA for issuance of similar prohibitions in National Marine Sanctuaries in California.</li> <li>▪ Review vessel information from State Lands Commission, write report, and submit report to the Legislature by October 1, 2007.</li> <li>▪ Coordinate with the Regional Water Boards and develop a vessel inspection and enforcement program.</li> <li>▪ Coordinate implementation, inspection, and enforcement activities with the Regional Water Boards.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 0.3 PY for U.S. EPA for approval of state prohibition.</li> <li>▪ 0.3 PY for review of vessel information from State Lands Commission and submit report to the Legislature by October 1, 2007.</li> <li>▪ 0.2 PY to develop a vessel inspection and enforcement program with the Regional Water Boards.</li> <li>▪ 0.2 PY to coordinate implementation, inspection, and enforcement activities with the Regional Water Boards</li> </ul>	<ul style="list-style-type: none"> <li>▪ Based on experience with preparation of the prohibition application for cruise ships.</li> <li>▪ Based on experience with preparation of the Cruise Ship Task Force report to the Legislature.</li> <li>▪ Based on experience with the Cruise Ship Task Force and NPDES Program.</li> <li>▪ Based on experience in the NPDES program.</li> </ul>	WRCE

**Cruise Ship Waste Discharge  
Program Report**

**Table 2. Cruise Ship and Ocean-Going Vessel Legislation Unfunded Workload Matrix**

<b>State Water Resources Control Board</b>				
<b>Additional Resources Necessary Beginning FY 2008-09</b>				
<b>PY(s)</b>	<b>Workload</b>	<b>Workload Standard</b>	<b>Basis for Standard</b>	<b>Staff Classification</b>
<b>CONTRACT RESOURCES NECESSARY FOR SIX MONTHS BEGINNING JULY 2008</b>				
Contract Resources \$200,000	<ul style="list-style-type: none"> <li>▪ Develop electronic reporting database for cruise ship and ocean-going vessel waste releases.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Contract resources necessary to develop and implement the electronic database.</li> <li>▪ Total: \$200,000</li> </ul>	<ul style="list-style-type: none"> <li>▪ Assume 2 PY for 6 months to convert an existing database for cruise ship and ocean-going vessel waste reporting. 2 PY for 6 months = 2,000 hours. Assume average contractor cost is \$100 per hour. 2,000 hours x \$100/hour = approximately \$200,000.</li> </ul>	Contractor
<b>Total: \$200,000 for Contract Resources</b>				
0.2 PY	<ul style="list-style-type: none"> <li>▪ Outreach and Guidance.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Create, update, and maintain guidance materials and provide coordination with other regulatory agencies.</li> <li>▪ PY = 0.2</li> </ul>	<ul style="list-style-type: none"> <li>▪ Assume an average of four hours per week is required to create, update, and maintain guidance materials and coordinate with other regulatory agencies.</li> </ul>	WRCE or ES
0.2 PY	<ul style="list-style-type: none"> <li>▪ Maintain electronic reporting database.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Update and maintain the reporting database. Includes necessary website posting.</li> <li>▪ PY = 0.2</li> </ul>	<ul style="list-style-type: none"> <li>▪ Assume that the database, once up and running, will require minimal maintenance.</li> </ul>	WRCE or ES
0.3 PY	<ul style="list-style-type: none"> <li>▪ Informal and formal enforcement actions.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Total PY = 0.3</li> </ul>	<ul style="list-style-type: none"> <li>▪ Assume AG support will include technical reports and assessment of water quality impacts.</li> </ul>	WRCE or ES
0.3 PY	<ul style="list-style-type: none"> <li>▪ Inspections.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 20 Inspections @ 30 hours each = 600 hours PY= 0.3</li> <li>▪ Total PY= 0.3</li> </ul>	<ul style="list-style-type: none"> <li>▪ Assume each inspection requires 30 hours for travel, inspection time, report writing, and training.</li> </ul>	WRCE or ES
<b>Total: 1.0 PY</b>				



**Cruise Ship Waste Discharge  
Program Report**

**Table 3. Cruise Ship and Ocean-Going Vessel Legislation Unfunded Workload Matrix**

<b>Regional Water Quality Control Boards 2, 4, and 9 (1 PY each)</b>				
<b>Additional Resources Necessary Beginning FY 2008-09</b>				
<b>PY(s)</b>	<b>Workload</b>	<b>Workload Standard</b>	<b>Basis for Standard</b>	<b>Staff Classification</b>
0.4 PYs	<ul style="list-style-type: none"> <li>Review Spill Reports</li> </ul>	<ul style="list-style-type: none"> <li>500 Spill Reports @ 1.7 hours each = 840 hours = 0.4 PY</li> </ul>	<ul style="list-style-type: none"> <li>On average, there are about 10,000 ocean-going vessel visits in California annually.</li> <li>Assume 5 percent noncompliance - based on the industry statement that the prohibition would not be a problem.</li> <li>It takes 1.5 hours to review a spill report.</li> <li><math>PY = [Workload \times Cost \text{ Factor (hours)}] / 2,000 \text{ hours per PY}</math></li> </ul>	WRCE
2.6 PYs	<ul style="list-style-type: none"> <li>Inspection/Enforcement Actions</li> </ul>	<ul style="list-style-type: none"> <li>400 Informal Enforcement @ 5.75 hours each = 2,300 hours = 1.2 PYs</li> <li>100 Inspection/Formal Enforcement @ 28.6 hours each = 2,860 hours = 1.4 PYs</li> <li>Total = 2.6 PYs</li> </ul>	<ul style="list-style-type: none"> <li>Assume all spill reports are followed up with a formal or an informal enforcement action.</li> <li>Assume 80 percent of total enforcement actions is informal; the rest is formal.</li> </ul>	WRCE
<b>Regional Water Quality Control Boards Total: 3.0 PYs</b>				