



National Transportation Safety Board
Washington, D.C. 20594

Report Date: August 12, 2008

Environmental Response Group Chairman's Analysis Report

A. Accident Identification

Description: Cosco Busan Allision with San Francisco-Oakland Bay Bridge
Commodity: Intermediate Grade Fuel Oil (IFO-380)
Location: San Francisco Bay
Date/Time: November 7, 2007, 08:30 PST
NTSB No.: DCA08MM004

B. Accident Summary

On Wednesday, November 7, 2007, about 0830 (LMT), the Hong Kong-registered, 901-foot container ship *Cosco Busan* allided with the fendering system at the base of the delta tower of the San Francisco-Oakland Bay Bridge (Bay Bridge). The ship was outbound from berth 56 in the port of Oakland carrying a load 2,529 containers, and was destined for Busan, Korea.

The vessel was scheduled to depart the berth at 0630. A San Francisco Bar Pilot arrived at the vessel about 0620 and met with the captain of the vessel. Due to restricted visibility in the harbor, the pilot and Master postponed sailing until visibility improved. While waiting for the visibility to improve, the pilot, master, and watch mate adjusted (tuned) the ship's two radars with regard to picture display and target acquisition on the ARPA (automatic radar plotting aid) until the pilot was satisfied the radars were performing acceptably. According to the VDR transcript, the ship's sailing was also delayed by the need to complete some ships paperwork. About 0730, the pilot estimated visibility had improved to approximately ¼ mile and according to the pilot's statement, he consulted with the master before getting underway.

About 0745 the vessel departed berth 56 with the aid of the tractor tug *Revolution* on the port quarter pulling with 1 line and the ship's 2700 HP bow thruster. The bridge navigation crew consisted of the master, the third mate, a helmsman and the pilot. The chief mate and a lookout were on the bow, and the second mate was on the stern. After the vessel eased off the dock, the pilot had the tug shift around to the center chock on the stern as a precaution for the outbound transit in the reduced visibility "for insurance in case I needed help in the middle of the channel" and started making headway out of the

estuary.^[1] The dredge *Njord* was working towards the end and on the west side of the estuary and the *Cosco Busan* passed to the right of it without incident.

The pilot stated as the *Cosco Busan* continued to make its way out of the Inner Harbor Entrance Channel, he could see the #4 and #6 buoys pass by and noted that their associated lights were visible. He kept the vessel to the high side of the channel as he departed the estuary in anticipation of the flood current he would encounter. He stated that the visibility again diminished, and that he could not see the #1 buoy, marking the northern boundary of the entrance to Bar Channel as the vessel passed by. At this time, the vessel was making approximately 10 knots.

The pilot stated that he used the VRM (variable range marker) set at 0.33 nm as a reference off the Island of Yerba Buena as he made his approach to the bridge, as was his usual practice. The pilot stated the 0.33 nm distance off Yerba Buena Island keeps the vessel at approximately the mid-point of the Delta-Echo span of the towers of the Bay Bridge. As the *Cosco Busan* passed close to the No. 1 buoy off the southwest tip of the island, the pilot issued rudder orders to cause the vessel's heading to start to come left. The ship's heading continued to swing further left and with the ship still making about 10 knots, the ship's heading was soon almost parallel to the bridge with a gyro heading of approximately 241 degrees.

Vessel Traffic Service (VTS) controller monitoring vessel traffic noticed the ship was out of position for making an approach to the bridge's Delta-Echo span. A VTS controller then contacted the pilot and informed him that their Automatic Information System (AIS) had the *Cosco Busan* on a heading of 235 degrees and asked the pilot if his intentions were still to use the Delta-Echo span. The pilot responded that he still intended to use the delta-echo span and the vessel was swinging around to the northwest with the heading showing 280.

As the *Cosco Busan* started coming right to make its way under the bridge, according to the master's statement to the U.S. Coast Guard, visibility was very low and estimated to be around 30 meters. As the vessel continued its approach to the bridge, the pilot ordered hard starboard rudder and shortly thereafter, the Chief Mate on the bow called to the master via UHF radio, pointing out that the Delta tower was very close. The vessel struck the corner of the fendering system at the base of the Delta tower at approximately 0830. Immediately upon realizing the vessel had allided with the base of the tower the pilot ordered hard to port on the rudder in an attempt to lift the stern of ship away from further impact.

Shortly afterward, the pilot radioed the VTS and informed them of the allision with the tower and that he was proceeding to anchorage 7, located just west of Treasure Island, and that he planned on anchoring the vessel. He notified his pilot office of the incident, and stated that when he saw a sheen of oil in the water at the anchorage, he immediately notified the VTS.

Another San Francisco Bar pilot relieved the pilot of the *Cosco Busan* while the ship was at anchorage 7 and the accident pilot was given a alcohol test (saliva strip) before departing the ship. The accident pilot was then taken to the pilot office for mandatory drug and alcohol testing. Around 1002 and due to the relief pilot's concern over the vessel's draft and the water depth at anchorage 7, the *Cosco Busan* heaved anchor and shifted to anchorage 9, located just south of the Bay Bridge, where the vessel again anchored.

C. Spill Quantification, Communication and Notifications

Actions Taken to Quantify the Amount of Oil Released

On the morning of the *Cosco Busan* allision, the U.S. Coast Guard (USCG) and California Department of Fish and Game, Office of Spill Prevention and Response (DFG-OSPR) sent investigators to the vessel to determine the quantity of fuel oil released. The USCG Pollution Investigator boarded the vessel around 0947 and after conversing with the ship's Chief Engineer, and reviewing the oil record book and ship schematics, at 1030 reported a net fuel oil loss of 0.4-metric tons, or roughly 146-gallons to the Sector Command Center; the Unified Command was advised shortly thereafter.

After waiting nearly two and a half hours on Yerba Buena Island for transportation to the *Cosco Busan*, the DFG-OSPR Oil Spill Prevention Specialist boarded the vessel at 1230 and after conversing with the Chief Engineer, and completing tank soundings and measurements, at roughly 1335 calculated a 219 m³, or 58,020 gallon fuel loss. This information was not relayed to the SOSC until 1600 when the specialist returned to Yerba Buena Island; the Unified Command was not advised until 1700.

The USCG Pollution Investigator's inaccurate 146-gallon quantification was not provided to either the Qualified Individual or the oil spill response organizations (OSRO) on the day of the accident, thus it did not affect the level of OSRO resource mobilization. Further, since the Unified Command did not direct the deployment of OSRO resources on the day of the accident, the failure of the DFG-OSPR Oil Spill Prevention Specialist to quickly relay the accurate 58,020-gallon quantification to the Unified Command did not affect the OSROs' level of response. In fact, the OSROs indicated that had they received the 58,020-gallon spill quantification figure at 1335 when it was determined, the information would have likely only aided in the setup of assets for the next day since on-water recovery operations ceased at nightfall.

Also, the OSROs arrived quickly since they were close in proximity to the accident scene. They also had the luxury of being able deploy more assets as they felt that they were needed throughout the day. Had this accident occurred in some remote location, where the response resources were not located as nearby as they were to the San Francisco Bay, the timely quantification would have had much more bearing on the deployment and arrival of response resources to the scene. Thus, *the failure to quickly quantify and relay an accurate estimate of the quantity of oil spilled to the Unified*

Command did not affect the overall on-water recovery effort in this accident. However, the lack of a timely and accurate determination of the quantity of oil spilled under different circumstances could delay the rapid deployment of the necessary response equipment. (CONCLUSION)

Accurate and timely spill estimates of the quantity of oil spilled will facilitate maximum containment and recovery of the oil. These estimates also enable the members of the Unified Command, particularly the Federal On-Scene Coordinator (FOSC) and State On-Scene Coordinator (SOSC) to make sound judgments that sufficient resources are being deployed and to accurately inform the public of events impacting their communities. In this accident, both the FOSC and SOSC failed to pursue this information with a sense of urgency. To address this problem, Coast Guard Sector San Francisco and the California Department of Fish and Game Office of Spill Response should ***incorporate into the Area Contingency Plan specific procedures for quantifying oil spills and providing this information to the Unified Command in the most timely and expeditious manner.*** (RECOMMENDATION) The procedures should address and specify the agency who will serve in this capacity, transportation of appropriate USCG and/or State OSPR to and from the vessel, and communication of critical information to the Unified Command as soon as it is determined.

FOSC Evaluation of Response

The Unified Command system operates on the principle of shared command response by the appropriate Federal, State, and local authorities, and involved private entities, such as spill response companies, transporters and shippers of oil and hazardous materials. The FOSC holds the ultimate authority for all decision making related to the response and is responsible for directing Federal response efforts and coordinating other Federal efforts at the scene of a discharge or release. In the event of a marine oil spill it is the responsibility of the FOSC to ensure adequate oversight of response actions, and if upon determining that the response is not being properly conducted, to assume control of the response. Thus accurate oil spill quantification is needed in order for an FOSC to assess whether adequate response resources are being provided by the Responsible Party.

USCG Pollution Investigators included in their initial communications report from the *Cosco Busan* to the Incident Management Division (IMD) at Sector San Francisco, not only the 0.4-mt/146-gallon figure, but also the tank capacities and the pre-allision fuel tank quantities for the two port side fuel tanks suspected of being damaged. Despite having been provided tank capacities and pre-allision fuel quantities, the FOSC-Representative (FOSC-R), a Coast Guard officer assigned to Sector San Francisco, did not communicate either the maximum potential spill or reasonable worst case spill to the FOSC, nor did the FOSC ask for either of these two quantities. In fact, the FOSC and other Coast Guard Sector personnel erroneously became fixated on the 0.4-mt/146-gallon figure, the only numerical estimate included in briefings to the FOSC, and later released by the FOSC during a noon press conference.

Additionally, the incident commander from the O'Brien's Group maintained hourly communications with a Coast Guard Command Duty Officer at Sector San Francisco on the day of the accident, during which he relayed information as he was receiving it from the his command center and the OSROs working in the bay. This information was relayed from the O'Brien's Group incident commander through the Coast Guard Command Duty Officer at Sector San Francisco to the FOSC-R and SOSC in the Unified Command. Despite this contact, little, if any, of this information was relayed to the FOSC, who relied on the FOSC-R and IMD to assess and act on OSRO reports. There is no indication from the FOSC's statements to Safety Board investigators and his testimony during the Board's public hearing in April 2007 that the FOSC questioned the 146-gallon figure and actively pursued a more accurate estimate of the oil spilled or the maximum possible spill.

Although the Coast Guard Sector San Francisco was receiving regular updates throughout the day of the accident about the response activities, there is no indication that the FOSC demonstrated any sense of urgency about a lack of information about the spill response actions being taken. During a January 28, 2008 interview, the Commander of the Eleventh Coast Guard District explained that when significant spill events occur, the quantity of spillage is often unknown until much later in the investigation. He went on to say that consequently, the USCG responds to maximum potential spill volume, and not reported spill volume. The District Commander also indicated that this response policy is contained in the USCG Marine Safety Manual. As a result, the FOSC's failure to follow this policy virtually eliminated any chance that he would be able to properly determine whether the level of the response was sufficient. The Marine Safety Manual also stipulates that the FOSC is to consult with the responsible party on all response actions, and obtain necessary resources without prior consultation with the responsible party if deemed in the environment's best interest. According to the manual, the FOSC should be kept fully informed by the responsible party of all activities and action plans. The guidance of the Marine Safety Manual, if followed and practiced, should enable an FOSC to effectively provide the proper oversight to the spill response efforts. However, ***because the FOSC failed to follow the Coast Guard's policy as articulated in the Marine Safety Manual for estimating the magnitude of the release and overseeing response efforts, he was unable to properly fulfill his responsibilities as the FOSC.*** (CONCLUSION)

Notifications of Local Jurisdictions

According to California Government Code and the State Emergency Management Guide, in the event of an oil spill in State waters, the California Office of Emergency Services (OES) Warning Center is responsible for notifying affected local jurisdictions upon learning of the release.

When OES was informed that an unknown quantity of fuel oil had spilled from the *Cosco Busan* into the San Francisco Bay by the O'Brien's Group,¹ the only local agencies that OES notified were the Oakland Fire Department and the Alameda County Department of

¹ Report was received at 0942.

Environmental Health. As far as local notifications were concerned, the Standard Operating Procedure (SOP) for Hazardous Materials Incidents² in place at the time of the accident stipulated that all spills be reported to the local administrative agency. Thus since the accident was reported as occurring in Oakland, Alameda County, OES made the appropriate notification required. While not required, OES failed to notify adjacent and other counties situated along the San Francisco Bay about an oil spill that could have and in many cases did directly affect these jurisdictions. While this early warning would have been informative, it essentially would have been a courtesy because according to the counties interviewed by investigators.³ Other than limited supplies of booming material, these counties did not have any dedicated oil spill response equipment or personnel to assist with the containment and recovery of the spilled oil in the bay. Nevertheless, communities that may be impacted by the release of oil, hazardous materials, or other emergency situation have the right to be informed about such events by the appropriate authorities, in this case the California OES. ***Therefore, notification protocols followed by the California Office of Emergency Services on the day of the accident were inadequate because they failed to ensure that all communities impacted by the oil spill from the Cosco Busan were notified. (CONCLUSION)***

Since the time of the *Cosco Busan* accident OES has revised its SOP for Hazardous Materials Incidents. The most notable change to the SOP includes the requirement for OES to notify the appropriate county Public Safety Answering Point(s) (PSAP) in the event of a petroleum product release of 1-barrel or potentially 1-barrel. Notifications are to be both verbal and faxed. Which PSAPs shall be notified is based on whether the spill occurs in the ocean, a river or stream, or in a bay area. In the event of a bay area spill, as was the case with the *Cosco Busan* accident, all surrounding county PSAPs are to receive notification. The plan uses the San Francisco Bay as an example and lists the required notifications as Alameda, Contra Costa, Marin, Napa, San Mateo, Santa Clara, Solano, Sonoma, and San Francisco.

The San Francisco Bay area is unique in its sheer size and in the number of counties surrounding it. Since all of these counties are susceptible to the impact of a spill that may occur several counties away, an equally unique and expansive local notification system is essential. Had these revised notification requirements been in followed at the time of the *Cosco Busan* accident, all of the counties within the San Francisco Bay area would have been alerted to the oil spill within roughly two hours. The revised notification requirements would have also prompted updates about the spill to the local counties. Because these revised notification requirements should facilitate better situational awareness among affected and potentially affected counties in California in the event of open water spills of oil or other petroleum products, no recommendation is proposed.

Although neither the Coast Guard Sector San Francisco nor the DFG-OSPR were responsible for alerting local government agencies or officials about the spill, the Coast Guard Sector San Francisco was severely criticized during the initial phase of the spill response for not notifying and keeping the city/county of San Francisco, the other

² SOP-SIII.05

³ San Francisco, Marin, and San Mateo counties

potentially affected surrounding counties, and the news media informed about the extent and volume of the spill and response efforts. Once the Coast Guard Sector and the DFG-OSPR activated the area contingency plan and established the unified command, the two units were then responsible for releasing information to the news media and the public. The decision of the FOSC to release the figure of 146-gallons oil spilled rather than pursuing a more accurate estimate or a worst-case estimate proved to be public relations gaffe and greatly diminished the credibility of the Coast Guard with the public, local and State officials. However, this decision did not adversely affect the initiation and execution of the spill response activities as discussed in the next section.

D. Spill Response

Actions of the Vessel Crew and Qualified Individual

Under the California's nontank vessel contingency plan regulations⁴ the vessel is required to contact the OSRO(s) immediately, but within 30 minutes after discovery of discharge. According to USCG Vessel Traffic Services (VTS) transcripts the pilot of the *Cosco Busan* first contacted VTS regarding oil in the water at 0857. The relief pilot proceeded to notify the Marine Spill Response Corporation (MSRC), one of its contracted OSROs, at 0917, 20-minutes after the vessel's first report of oil in the water.

These regulations also require that the owner/operator or desingnee initiate contact with the Qualified Individual⁵, California OES, and the National Response Center immediately, but no longer than 30 minutes after discovery of discharge. The Qualified Individual identified in *Cosco Busan's* nontank vessel contingency plan, The O'Brien's Group, was notified by the *Cosco Busan* 45-minutes after the allision occurred and 18-minutes after the vessel first reported oil in the water at 0915 via its command center in Slidell, Louisiana. The O'Brien's Group proceeded to notify California OES of the allision at 0942, 45-minutes after the vessel reported oil in the water, and the National Response Center at 0945, 48-minutes after oil in the water was reported by the vessel. The SOSC did not consider this delay in notification to be significant since state representatives were already on-scene at the beginning of this incident and the primary concern onboard the *Cosco Busan* was safely anchoring and securing the vessel, which was accomplished at 0852.

After completing the required notifications, the Qualified Individual mobilized a spill management team and dispatched an incident commander from The O'Brien's Group Brea California office at 0950. The Incident Commander officially confirmed activation of the *Cosco Busan's* two OSROs, MSRC and NRCES, at 0951 and 1041, respectively, before traveling by automobile from Ventura California to Incident Command Post in San Francisco where he arrived at 1800 on the day of the accident. During the time he was traveling, the Incident Commander maintained contact with The O'Brien's Group Slidell, LA command center and directly with the OSROs, receiving periodic updates

⁴ Title 14 California Code of Regulations, Section 827.02(d)(2).

⁵ Also referred to as the Responsible Party

about resources deployed and the progress of the response effort. The Incident Commander had hourly contact with a Coast Guard CDO, during which he relayed information as he was receiving it from the field.

The SOSC remarked that the only interaction he had with the Qualified Individual on the day of the accident was a telephone conversation that occurred at 1415 with the designated Incident Commander. During this conversation he informed the Incident Commander that he would not be recognized as such until he arrived at the Unified Command and that in his absence the incident would be managed by the FOSC and SOSC as if no responsible party were engaged. It should be recognized that the Unified Command is not a standing organization prepositioned on an accident scene with all the appropriate logistics and personnel on hand. Although an incident may be initially managed by available personnel, some time may be required for the arrival of experts and incident commanders. Despite the Qualified Individual's lack of physical presence, the Incident Commander was actively monitoring the contractors' response efforts and passing pertinent information to the USCG on a regular basis while en route to the scene. Thus the Safety Board believes that *effective communications regarding response activities were established and maintained between the Oil Spill Response Organizations, Qualified Individual, Coast Guard and the Unified Command on the day of the accident. (CONCLUSION)*

Timeliness and Effectiveness of Oil Spill Response Organizations' Efforts

On the day of the *Cosco Busan* allision both MSRC and NRCES mobilized all of their response resources positioned in the San Francisco Bay area. MSRC activated all of its mobile skimming and boom boats in the San Francisco and Richmond area and NRCES deployed all of its resources from Alameda. Additional MSRC resources were positioned roughly 15 to 20 nautical miles away in Crockett and Martinez, CA and the remaining 25-percent of NRCES' assets were positioned in Benicia, CA roughly the same distance away. Both OSROs estimated the time needed to organize and mobilize additional crews to respond from these northeastern locations at about three hours, which might have placed the resources in the San Francisco Bay at or near sunset. Alternatively, had the 1030 report accurately estimated the 58,020-gallon fuel loss, and had it been reported to MSRC and NRCES, an additional four hours may have been gained for the deployment of additional oil spill response resources.

On the day of the *Cosco Busan* allision, dense fog lingered around the San Francisco Bay for most of the morning and early afternoon. This adverse weather condition prevented good visual observation from the overflights, the main method used to direct spill response assets. Without good visibility, it is very difficult to direct equipment, especially larger capacity vessels that do not move quickly and are not well suited to responding to rapid changes in positioning. Smaller skimming vessels move much quicker and are able to effectively chase streams of oil on the water. Thus due to lack of situational awareness caused by the poor visibility it is unknown whether the deployment of additional skimmers during the early hours following the allision would have been effective in locating or recovering much if any additional oil. In fact both MSRC and

NRCES admitted getting lucky late in the afternoon when the smaller vessels encountered and began collecting oil ribbons near the Golden Gate Bridge after the oil had begun to separate and spread.

As a result of learning of the *Cosco Busan* allision via radio traffic, the contracted OSROs, MSRC and NRCES, proactively enabled response resources within minutes of the accident. By 0950 approximately one hour and 20 minutes after the allision, 8,588 bbls/day of skimming capacity was on-scene, roughly 40 minutes later 40,476 bbls/day skimming capacity was on-scene, and six hours after the allision the total on-site skimming capacity was 75,043 bbls/day. This far exceeded the State of California's worst case scenario requirement for 5,874 bbls/day skimming capacity to be on site within six hours. Thus, despite the grossly underestimated 146-gallon oil spill quantification figure and the significantly delayed 58,020-gallon accurate spill assessment, the combined effort of the two OSROs identified in the *Cosco Busan's* California Nontank Vessel Contingency Plan exceeded the requirements of the plan and California's six-hour nontank vessel response capability standard for on-water oil recovery capacity and containment booming. *Thus, the level of response was timely and effective. (CONCLUSION)*

E. Nontank Vessel Response Plans

Amongst the many provisions of the California Lempert-Keene-Seastrand Oil Spill Prevention and Response Act is an oil spill contingency planning requirement for all nontank vessels. Nontank vessel oil spill contingency plans are used to prepare for response efforts that would be necessary in the event of an oil release into California waters. These plans require nontank vessel owners/operators to establish an advance arrangement with OSRO(s) that are capable of responding to any incident that occurs in the vessel's operating area with sufficient response capability to handle a reasonable worst case oil spill, within a specified time period. California oil spill contingency plans must also provide a list of contacts to call in the event of an oil spill, identify procedures for notifying local, State and Federal agencies, and identify a Qualified Individual who has full authority to implement removal actions. An OSRO certification and rating system established by the DFG-OSPR Administrator is currently in existence.

The Coast Guard and Maritime Transportation Acts of 2004 (CGMTA 2004) requires owners/operators of nontank vessels 400-tons or greater to prepare and submit plans to the USCG for responding to worst case and substantial threats of oil discharges. The statute applies to U.S. flagged nontank vessels as well as those that operate on the navigable waters of the U.S. CGMTA 2004 also mandates that the USCG issue regulations requiring the submission of nontank vessel response plans to the USCG by August 8, 2005. Since the enactment of CGMTA 2004, the USCG has failed to issue regulations enabling it to enforce the statute, but has published interim guidance to owners/operators of nontank vessels providing a voluntary process by which they may develop USCG approved response plans. The directive published in the Navigation and

Vessel Inspection Circular No. 01-05 CH1 is merely guidance to owners of nontank vessels for preparing response plans, and is not itself enforceable by the USCG.

The planning, identification, and prepositioning of oil spill response resources is important for ensuring prompt mitigation of environmental damages. During open water oil spill emergencies, a responsible party cannot afford to waste valuable response time searching for reporting requirements, locating available vendors and negotiating contracts. Limiting the impact area of the spill and rapidly recovering oil from the water is paramount to the success of remediation efforts. Disastrous environmental consequences and compounded clean up costs and effort may result from the failure to act quickly when oil mobility is affected by wind, waves, tides and currents.

The *Cosco Busan* possessed a California nontank vessel oil spill contingency plan. The plan was easily set in motion when the vessel notified the Responsible Party at 0915, immediately after USCG notifications were made and the vessel was secured. The two contracted OSROs, MSRC and NRCES, were clearly identified in the contingency plan. Both OSROs quickly confirmed that Fleet Management was a client, since contract arrangements were made when the plan was drafted. These prearranged logistics enabled the OSROs to begin site safety assessment/air monitoring less than one hour after receiving notification of the accident and oil skimming operations minutes later, without interruption. Because NRCES response crews arrived on the scene very quickly, the lack of any prearranged agreement might have resulted in their reluctance to take the financial risk of collecting oil spillage until they were certain of being compensated. As the spilled oil dispersed rapidly in the tidal currents of the San Francisco Bay, any delay in the OSRO response would likely have negatively affected the success they had in encountering and recovering oil.

Without the existence of California's statute and regulations there would have been no mechanism to ensure that the *Cosco Busan* was prepared to provide response to the incident. According to the USCG, California, Alaska, Washington, Oregon, and Texas are the only States that have statutory requirements for nontank vessel contingency planning. Because there are currently no enforceable federal nontank vessel contingency planning regulations, vessels that operate in the remaining States are potentially unprepared to handle a situation similar to the *Cosco Busan* accident. ***In the absence of a federal regulation, the risk of environmental damage following accidents involving nontank vessels operating in States lacking response planning requirements is much greater than in those States that have response planning requirements.***
(CONCLUSION)

Since the *Cosco Busan* accident, on June 23, 2008 the USCG published notice in the *Federal Register* of a policy to begin enforcing nontank vessel response plan provisions as required by the CGMTA 2004, effective August 22, 2008. The notice reiterates encouragement for nontank vessels to submit plans in accordance with NVIC 01-05 CH1. Until such time that regulations are issued and in effect the USCG will continue issuing interim operating authorization letters for those plans meeting the requirements of the CGMTA 2004. Additionally, this new policy is only applicable to vessels exceeding

1,600 gross tons, which the USCG considers to pose the greatest threat. Although the notice indicates that the USCG may initiate vessel operational controls against owners and operators with deficient plans, it stops short of taking enforcement action against vessels that do not have plans at all. The Safety Board supports CGMTA 204, and believes that the Coast Guard should expedite the publication of regulations as mandated by Congress.

F. Local Planning

When DFG-OSPR introduced the local government grant program to California in 1993 to encourage local governments to develop and maintain oil spill contingency plans, only seven of the 11 counties situated in the San Francisco Bay and Delta area⁶ applied for and received the \$50,000 in grant money. Since that time, annual grants of \$5,000 have been available for plan maintenance, however only four⁷ of these counties had up to date plans at the time of the *Cosco Busan* accident; the other three counties had not updated their plans since their development. In addition to plan maintenance, grants can be used to cover expenses associated with participation in Area Committee planning and exercises. While the grant program is voluntary DFG-OSPR requires those counties opting for contingency plans to update them every three years in order to continue receiving funds.

The purpose of establishing the local government grant program was to encourage plan development and to foster a coordinated response effort between local governments and Federal and State officials in the event of an oil spill. One advantage of having a local plan is that it indicates to its user who should be contacted in a given situation, and what local resources are available and how they can be acquired; all information that must be current in order to be effective and useful.

It is beneficial for local governments to participate in Area Committee planning. Such participation allows them to become familiar with the personnel who could potentially be involved in a response, pollution response doctrine, and the function of the Incident Command System (ICS). An individual who actively participates should be able to develop a good working relationship with Federal and State officials, a clear understanding of their role in the event of an emergency situation, and the manner by which they will receive information. Prior to the *Cosco Busan* accident, the USCG and California DFG-OSPR had continually invited local jurisdictions to participate in area planning and various drills and exercises. Despite these invitations, DFG-OSPR indicated that the level of participation by the counties in the San Francisco and Delta Bay area in these events was sporadic. Since the time of the accident however, DFG-OSPR reported that counties have expressed a high level of interest in future participation in these types of events.

As was the case in the *Cosco Busan* response, many local agencies did not have a good understanding of the Unified Command structure, ICS, or their role in the response; as a

⁶ Alameda, Contra Costa, Marin, San Francisco, San Mateo, Solano and Sonoma counties

⁷ Marin, San Francisco, Solano and Sonoma counties

result felt that they were overlooked and underutilized. Although local governments may not have an authoritative role when an incident is handled under ICS and Unified Command is established, it is important that they be familiar with the Unified Command hierarchy in order to facilitate exchanges of information and mutual aid. While their contributions may be limited as far as response resources are concerned, the Safety Board believes that active participation in planning and exercises on the part of local jurisdictions is beneficial to their familiarity with accident response coordination and overall situational awareness. ***Ultimately, the combined lack of local government plans and participation in Area Committee planning in the San Francisco Bay area had no bearing on the response. (CONCLUSION)***

Crystal G. Thomas
Environmental Response Group Chairman

Conclusions –

- 1. The failure to quickly quantify and relay an accurate estimate of the quantity of oil spilled to the Unified Command did not affect the overall on-water recovery effort in this accident. However, the lack of a timely and accurate determination of the quantity of oil spilled under different circumstances could delay the rapid deployment of the necessary response equipment.*
- 2. Because the FOSC failed to follow the Coast Guard's policy as articulated in the Marine Safety Manual for estimating the magnitude of the release and overseeing response efforts, he was unable to properly fulfill his responsibilities as the FOSC.*
- 3. Notification protocols followed by the California Office of Emergency Services on the day of the accident were inadequate because they failed to ensure that all communities impacted by the oil spill from the Cosco Busan were notified.*
- 4. Effective communications regarding response activities were established and maintained between the Oil Spill Response Organizations, Qualified Individual, Coast Guard and the Unified Command on the day of the accident.*
- 5. The level of response was timely and effective.*
- 6. In the absence of a federal regulation, the risk of environmental damage following accidents involving nontank vessels operating in States lacking response planning requirements is much greater than in those States that have response planning requirements.*
- 7. The combined lack of local government plans and participation in Area Committee planning in the San Francisco Bay area had no bearing on the response.*

Recommendations –

- 1. To the USCG and DFG-OSPR:
Incorporate into the Area Contingency Plan specific procedures for quantifying oil spills and providing this information to the Unified Command in the most timely and expeditious manner.*