Harbor Safety Committee of the San Francisco Bay Region  
Thursday, February 11, 2010  
Pier 1 Conference Room, Port of San Francisco, California

Joan Lundstrom, Chair of the Harbor Safety Committee of the San Francisco Bay Region (HSC), San Francisco Bay Conservation and Development Commission (BCDC); called the meeting to order at 1002. Alan Steinbrugge, Marine Exchange of the San Francisco Bay Region (Marine Exchange), confirmed a quorum of the HSC.

Committee members (M) and alternates (A) in attendance with a vote: Capt. Marc Bayer (M), Tesoro Refining & Marketing Company; John Berge (M), Pacific Merchant Shipping Association (PMSA); Capt. John Cronin (M), Matson Navigation Company; Capt. Paul Gugg, United States Coast Guard (USCG); Capt. Peter McIsaac (M), San Francisco Bar Pilots (Bar Pilots); Capt. Jonathan Mendes (M), Starlight Marine Services; Capt. Pat Murphy (M), Blue & Gold Fleet; Capt. Eric Osen, (M), Chevron Shipping Company; Marina V. Secchitano (M), Inlandboatmen’s Union; Rich Smith (M), Westar Marine Services; Maj. Samuel Volkman, United States Army Corps of Engineers (USACE); Gerry Wheaton, National Oceanic and Atmospheric Administration (NOAA).

Alternates present, and those reporting to the HSC on agenda items: Capt. Esam Amso (A), Valero Marketing and Supply Company; Robert Chedsey, California State Lands Commission (State Lands); Capt. Allen Garfinkle, Board of Pilot Commissioners; Capt. Jack Going (A), Baydelta Maritime; Capt. Lynn Korwatch, Marine Exchange; Rob Lawrence, USACE; Mike Miller, Board of Pilot Commissioners; Lt. Simone Mausz, USCG; William Nickson (A), Transmarine Navigation; Linda Scourtis (A), BCDC; Capt. Gary Toledo, California Office of Spill Prevention and Response (OSPR).

The meetings are always open to the public.

Approval of the Minutes

Corrections to the minutes of the January 14 meeting:

At the bottom of page three, the question attributed to Jeff Lloyd, should be attributed to Capt. Going. Capt. Going should be added to the list of those alternates that were present, but without a vote. On Page five, the second bullet of the State Lands report, the second sentence should read: For terminals subject to high velocity current, an alternative means of achieving the same, or a greater, level of safety for public health and the environment is for the terminal to have six hundred feet of boom that can be deployed in thirty minutes by trained personnel. Capt. Toledo submitted corrections to the minutes.

A motion to accept the minutes as corrected was made and seconded. It passed without discussion or dissent.

Comments by the Chair – Lundstrom

- The letter sent to the California Department of Transportation as the result of the vote taken at the January 2010 meeting of the HSC was attached to the minutes for that meeting, which included an article on fendering from the San Francisco Examiner.
- Lundstrom was among representatives from BCDC to meet with a delegation of representatives from Tokyo, Japan, and give a briefing on how navigational safety is approached in our area. The Tokyo region is home to six major ports with two hundred twenty thousand moves per year, in addition to traffic generated by sixteen fishing ports. The delegation received copies of the various educational materials produced by the HSC over the years.
Coast Guard Report – Capt. Gugg

- There had been much good work accomplished by the three HSC work groups that had recently met at the California Maritime Academy (CMA).
- The big storm of four weeks prior to the meeting had caused severe damage to wave panels and protective mooring at Coast Guard facilities at Yerba Buena Island. Repairs were estimated to last two months before patrol boats could be located there again.
- Coast Guard vessels have access to an encrypted Automated Identification System (AIS) channel that would remove their vessels from appearing on non-governmental AIS displays. Capt. Gugg said that they had received questions from mariners on the water that could see Coast Guard vessels on the water that weren’t appearing on their displays.

Lt. Mausz, read from a report attached to these minutes.

US Army Corp of Engineers Report – Maj. Volkman

Lawrence read a report attached to these minutes.

Sean Kelley, Coast Guard Vessel Traffic Service (VTS), thanked USACE for the responsive effort of their debris boats as a result of the recent series of storms. Capt. Gugg thanked USACE for allowing the Coast Guard patrol boats to moor at their dock while the Coast Guard’s were being repaired.

Lundstrom asked how the Coast Guard was commonly notified of significant debris in the water. Kelley said that they are typically notified by radio reports from mariners on the water. VTS then passes along the information by broadcast advisories.

Clearing House Report – Steinbrugge

Steinbrugge read a report that is attached to these minutes.

OSPR Report – Capt. Toledo

- The meeting of the tug, dredge, and navigation work groups at CMA led to a significant discussion and exchange of ideas. OSPR always welcomes the comments developed by meetings of the work groups.
- Berge’s term as a dry cargo representative would be up in March. OSPR was accepting applications.
- The report from the Best Achievable Technology focus group was being edited to shorten it a bit.
- OSPR may have to reschedule the Best Achievable Technology focus group meeting to work around the California Air Resources Board’s (ARB) Technical Work Group meeting that had been scheduled for April 5.
- Representatives from OSPR would meet on February 16 to discuss the upgrade of the Sharing the Bay video.

Lundstrom said that it was important to get suggestions on best practices in the event of loss of propulsion to Capt. Toledo. Capt. Toledo said that OSPR was compiling the suggestions received for modified operational procedures, and was interested to learn what companies had come up with on their own effort.

ARB Report –

Lundstrom said that no representative could appear for ARB, so she summarized the report attached to these minutes. She said that ARB was very open to reports the Coast Guard was collecting on changing traffic patterns, which might
be a result of ARB’s regulations. CMA was investigating root causes of propulsion failures and would present their report for comment at the April 5 meeting in Sacramento. Contact information for ARB staff is on the last page of their report.

**NOAA Report – Wheaton**

- David Kennedy had replaced Jack Dunigan as the head of the National Ocean Service (NOS) upon Dunigan’s retirement.
- The Los Angeles/Long Beach HSC had requested that NOAA compare British Admiralty charts to NOAA’s own. Wheaton said that they would do that comparison for all five of the state HSC’s as well as a comparison of the *Coast Pilots* to *Sailing Directions*.
- A brief dry spell, with valley fog, was expected for the week ahead.

**State Lands Report – Chedsey**

- Chedsey read from a report attached to these minutes.
- Their annual Prevention First symposium was scheduled for October 19th and 20th in Long Beach.

**Board of Pilot Commissioners President, Miller: Introduction of Capt. Garfinkle, New Executive Director.**

- Miller said that he was happy to be in attendance at a meeting of the HSC, and that he had already learned many things that would be useful to his area of responsibility.
- Capt. Garfinkle had been selected from among twenty very qualified applications. He said that Capt. Garfinkle was rated as an unlimited master, had sailed for Matson for thirty-three years, and had also earned a law degree. Miller said that attending meetings of the HSC would be among Capt. Garfinkle’s duties.

- Capt. Garfinkle said that he was very excited by the challenges and opportunities his new job presented. He said that he was proud to be a member of the Bay Area maritime community and that his door was always open.

**Tug Work Group – Capt. Mendes**

- Thanked those that attended the January 28 meeting at CMA, and thanked CMA for hosting the event. He said that the demonstration of CMA’s tug escort training simulator had been very impressive.
- They continue to gather information on vessel bitt strength and would meet in March with representatives from the Western States Petroleum Association (WSPA).
- The web portal for lessons learned was up and running on the Marine Exchange’s web site. Capt. Mendes thanked Chris Hicks and Kaitlin Ortega, of the Marine Exchange, for their help in creating the web portal that allows tug companies to share lessons learned and safety bulletins.
- The bollard used for testing tank-vessel escort tugs had been taken out of service by the Port of Richmond pending a survey of its integrity and strength for which there were few available funds from the port. Capt. Mendes said that the situation would somehow need to be addressed as soon as possible.
- Other items on the agenda for their next meeting would be best practices for barges alongside ships in Oakland, and increased speed limits for articulated tugs and barges through Pinole Shoals.

Capt. Korwatch said that the Marine Exchange would be happy to host web portals for the other work groups so long as they could live with a disclaimer that the Marine Exchange was not responsible for generating the content. Lundstrom asked the Marine Exchange to provide a demo of the web portal for the March or April meeting of the HSC.
**Navigation Work Group – Capt. McIsaac**

- Capt. McIsaac summarized the draft letter to the Coast Guard requesting safety plans for dead ship tows through the Union Pacific Railroad draw bridge, which was attached to the January meeting minutes.

- Capt. Bayer said that the letter be amended to require safety plans for dead tows beneath any bridge in the HSC’s area of responsibility. Smith asked whether Capt. Bayer meant to include barges. Capt. Bayer said that he only meant to include dead-ship tows.

- Capt. Gugg said that the Coast Guard would welcome such a letter, but he advised that the applicable regulations were written such that the word *require* would be difficult for them to implement. He said that the Coast Guard already had an outreach program to educate contractors about the gravity of the situation.

- Secchitano asked whether the Coast Guard had talked to the Maritime Administration (MARAD) regarding the plans to tow out their vessels. Capt. Gugg said that they had.

- Catherine Hooper, from the public in attendance, asked who would be responsible for writing such a plan. Lt. Cmdr. Andrew Wood, USCG, said that it would be up to the contractor that moved the ships. Capt. Gugg said that if there were some sort of incident the Coast Guard would look to the towing company first.

- John Hummer, MARAD, asked what the plan might provide that wasn’t already covered. Lt. Cmdr. Wood said that it could provide more detail on when the tow would operate and which tug boats would be conducting the tow. Capt. Gugg said that under the applicable regulations that the Coast Guard was not in a position to give or deny approval for any tow or pass judgment on the adequacy of the towing vessels.

- Bob Gregory, Foss Maritime, said that they would be happy to share with the Tug Work Group the in-house form that they had designed for such situations. The form includes such information as planned working frequencies and measurements of the capabilities of the tugs involved.

- Wheaton said that he hoped that data from the Physical Oceanographic Real Time System (PORTS) would be included in any plan, because it had the most accurate data for wind and current conditions at the time of any proposed tow.

- Berge suggested that the word *require* be changed to *submit*. Capt. McIsaac said that he accepted the friendly amendment, as well as the suggestion to include all dead ship tows under all bridges.

A motion to accept the letter to the Coast Guard as amended was made and seconded. It passed without further discussion or dissent.

**Ferry Operation Work Group – Capt. Murphy**

There was nothing to report.

**Dredge Issues Work Group – Capt. Bayer**

- A meeting was held on January 26 as a result of an USACE survey from January 14 showing an average depth of thirty-three feet seven inches from the San Rafael-Richmond Bridge to the Carquinez Strait. A subsequent survey performed by the Corp from the San Rafael Bridge to Carquinez Bridge showed that the depth was really thirty four feet four inches. It was decided at the January 26 meeting that emergency dredging was not necessary as previously
thought since the depth was so close to the project depth of 35. It was possible that the USACE could tap into a fund for dredging if winter storms could be shown to have had an effect on safe navigation.

- Capt. Bayer then read from a proposed letter requesting the Corps of Engineers to study and analyze realignment of the North Bay Ship Channel, which was attached to the minutes of the January meeting.

Lundstrom said that the existing Federal channel had been laid out in the 1920’s. Since that time there had been changes in commerce and the continued effects of weather and spring run-off. Capt. Bayer said the channel had last been re-evaluated in the 1960’s. Maj. Volkman said that any new study would have to come as a result of a request such as the HSC was discussing.

Lundstrom said that a realignment of the channel could result in less need for dredging. Capt. Murphy asked whether the new ferry routes had been considered in the channel realignment. Lundstrom said that BCDC would take a look at all activities that might be affected by any proposed change. Maj. Volkman said that all comments would have to be considered as part of the process.

A motion to send the letter to the Corps of Engineers was made and seconded. It passed without further discussion or dissent.

Prevention through People Work Group

There was no report.

PORTS Work Group – Capt. Amso

- As result of the contract being signed between OSPR and the Marine Exchange, new projects were moving along.

PORTS Report – Steinbrugge

- Steinbrugge said that the current meter in Southampton Shoal might have to be pulled due to communications problems. Otherwise, projects were continuing as has been described by previous minutes.

Lundstrom said that the next project on the schedule for the PORTS work group was to discuss new, or better, ways to spread information gathered by the PORTS system.

Public Comment

Capt. Korwatch said that there would be a grant-writing workshop for Port Security Grants at CMA on February 17. The workshop was open to all those interested. She said that there was likely to be a lot of competition for the 2010 round of grants since there was no fund matching requirements.

Capt. Bruce Clark, CMA, said that all were invited to a planning conference on February 25 for their spill response drill scheduled for April 1.

Chris Lowe, Monterey Bay Aquarium, said that he was a friend of the late Capt. Fred Henning and would be interested to work with those interested in a memorial to him.

Hooper thanked the Coast Guard for their help during the recent visits by two high-profile cruise ships.
Old Business

There was none.

New Business

Capt Gugg said that with the Bay Area potentially coming out of the last three years of drought that it might be useful to get a briefing on the effect of increased fresh water flows on levees and currents. Capt McIsaac said that the Bar Pilots had already been talking to state hydrologists about the topic and would check to see if they would be willing to give a briefing on the topic. Lundstrom said that it would be a tentative topic for the March meeting.

Next Meeting

The next meeting of the HSC would convene at 1000, March 11, 2010 at the Pier 1 Conference Center, Port of San Francisco, San Francisco, California.

Lundstrom adjourned the meeting at a time not recorded.

Respectfully submitted:

[Signature]

Capt. Lynn Korwatch
February 8, 2010

Mr. Barton Newton  
State Bridge Maintenance Engineer  
California Department of Transportation  
1801 30th Street  
Sacramento, CA 95816

Subject: Fendering of Bridges Adjacent to San Francisco Bay Area Shipping Lanes

Dear Mr. Barton:

You may recall, several months after the Cosco Busan container ship struck the Bay Bridge, the Harbor Safety Committee (HSC) of the San Francisco Bay Region expressed its concern about whether bridge fendering systems might be designed to prevent a large vessel from rupturing oil as well as protecting the structural integrity of the bridge. Subsequently you and Ken Brown attended the April 10, 2008 HSC meeting to brief the Committee on protective fendering systems for bridges adjacent to shipping lanes. As a result of our discussion, the HSC recommended that the Department of Transportation independently analyze the energy-absorbing capacities of the key bridge fendering systems. We indicated our support for the Department’s intention to submit a research proposal to AASHTO to study new bridge protective designs in the 2009/2010 fiscal year.

A recent article in the San Francisco Examiner (attached) again raised the issue, citing “outdated technology remains in use” referring to the “bumper” system on Bay Bridge towers. The Harbor Safety Committee has long-standing concerns that effective energy-absorbing fendering be installed as bridges are repaired, retrofitted or in new construction adjacent to shipping lanes.

The Committee would be interested in an update on the status of advanced design of fendering systems. We continue to offer support to the Department for researching new technology. Please call me at (415) 461-4566 in this regard.

Sincerely,

Joan Lundstrom, Chair  
Harbor Safety Committee of the San Francisco Bay Region

Attachment: San Francisco Examiner, Nov. 5, 2009 Article: ‘Old Bridge Bumper Technology Means Future Oil Spills Likely’

Cc: Harbor Safety Committee
Old bridge bumper technology means future oil spills likely

By: John Upton
November 5, 2009

SAN FRANCISCO — Two years after a rigid bumper system on a Bay Bridge tower ripped open two fuel tanks of a wayward cargo ship, the dangerously outdated technology remains in use.

After the Cosco Busan crashed into the Bay Bridge and spilled 54,000 gallons of oil Nov. 7, 2007, the damaged bumper system — which is in place to protect the span’s towers from ships — was rebuilt with the same 1930s technology, despite newer designs being available.

The section of bridge currently under construction will also incorporate the antiquated designs.

The bar pilot steering the Cosco Busan two years ago mistakenly guided the container ship through heavy fog toward a tower of the Bay Bridge instead of through the passage between towers. The vessel avoided directly striking the bridge section, but the bumper system in place to protect the concrete tower gouged an 8-foot-deep, 212-foot-long gash in its hull during the collision.

It was through that massive opening that the 54,000 gallons of toxic bunker fuel gushed into the Bay, causing an environmental disaster.

The spill killed wildlife — including plants, fish eggs, birds and seals — and led to commercial fishing seasons being canceled the following two years.

Such collisions are rare, but they are seemingly inevitable: It was at least the seventh time that a Bay Bridge tower has been struck in 50 years, according to the National Transportation Safety Board. A tugboat, a barge, a ship and a small military seaplane are among vehicles that have collided with a tower.
In the 1930s, fenders were incorporated into the Bay Bridge — which was designed by Caltrans predecessor California Department of Public Works — to protect it from collisions, but they were not designed to protect fuel-carrying ships that might bang into them.

The bumper system crumpled during the Cosco Busan accident, as it was designed to do, and it was rebuilt by Caltrans at a cost of $1.5 million. But newer technology that has prevented Cosco Busan-type oil spills was not used.

Modern bridge bumper systems are designed like modern car bumpers, to absorb and dissipate energy from a collision to minimize damage to a bridge and to a ship. The old style of bumpers simply provide a buffer to protect a bridge tower.

Modern bumper technology is widely credited with averting an oil spill in Maine and minimizing a spill in Boston Harbor.

In September 1996, 170,000 gallons of oil spilled into the waters off Maine after the Julie M, a 560-foot oil tanker, crashed into a bridge.

The span was later replaced with the $130 million Casco Bay Bridge, which was built using $7 million worth of modern fenders that were credited with averting an oil spill in 2002, after they absorbed a blow from an oil tanker, Maine Department of Transportation Senior Engineer John Buxton told industry magazine Professional Mariner following the collision.

The Casco Bay Bridge bumper system is surrounded by gravel- and sand-filled pillars, some as wide as 60 feet, that are attached to the channel floor and coated with slippery plastic to redirect a ship and absorb its energy without necessarily stopping it. The final line of defense is heavy-duty rubber surrounding the bridge’s towers.

Despite evidence that modern bumper systems could help prevent a future oil spill in San Francisco Bay, the western span of the Bay Bridge will retain the 1930s-era bumpers, according to Caltrans spokesman Bart Ney.

Bumpers on the new eastern span will also follow the same general design that was used on the western span, 2003 bid documents show.

Ney said bumper systems exist that are designed to better protect ships, but Caltrans hasn’t made any decisions to redesign the Bay Bridge bumpers, which engineers call fenders.

“Our current fender system adequately protects the bridge,” he said.

The old-fashioned design of the bumper systems has been criticized by UC Berkeley engineering professor Abdolhassan Astaneh-Asl.

“If a ship hits this bridge and spills oil in the Bay, Caltrans should be taken to court,” he said.

**SF pilots lack modern tools to navigate, but that’s changing**

Capt. John Cota sits in a federal prison in Tucson, Ariz., for his role in the Cosco Busan spill, but his hitherto colleagues are using new equipment that could have prevented such disasters.

The Petaluma bar pilot, who directed the Cosco Busan into the Bay Bridge in 2007, was sentenced to 10
months in prison after he pleaded guilty to a pair of environmental misdemeanors stemming from the resulting oil spill.

Cota became the nation’s first bar pilot incarcerated for negligently performing his duties. He reported to the Federal Bureau of Prisons last month.

The shipping accident occurred when Cota became disorientated in heavy fog while using onboard navigational equipment, the National Transportation Safety Board said in its findings.

Bar pilots in other harbors carry laptops with all the necessary navigational equipment, but those in San Francisco have traditionally relied solely on the navigational equipment.

Cota abandoned the Cosco Busan’s working radar after it appeared to him to grow distorted, and he directed the ship toward a bridge tower after mistaking symbols on an electronic map for a safe passage space, according to the federal safety agency, which blamed Cota’s use of mind-altering pharmaceuticals for his confusion.

Cota had not previously piloted the Cosco Busan, and his attorney argued that the unfamiliar equipment was confusing and rendered the ship nonseaworthy.

Since mid-2008, the members of the San Francisco Bar Pilots Association have been supplied with and trained on laptops that are equipped with GPS mapping and other navigational software, according to Capt. Peter McIsaac, president of the association.

And recently, the financial burden of the equipment was shifted off the shoulders of the bar pilots. Legislation authored by Sen. Leland Yee, D-San Francisco/San Mateo, to tax shipping companies to provide funds for laptop-based navigational equipment and training for San Francisco’s bar pilots was signed last month by Gov. Arnold Schwarzenegger.

“The Cosco Busan oil spill was devastating for our region and reiterated the need to improve the response to future disasters and to develop the technology to avoid them in the first place,” Yee said in a statement.

Additionally, the San Francisco Bar Pilots Association established a committee after the Cosco Busan spill to ensure pilots use the best technology available, according to McIsaac.

Pleas for brighter-colored bumpers fall on deaf ears

Black plastic pieces that broke off the damaged bumper after the Cosco Busan struck a tower of the Bay Bridge were hazards for ships in San Francisco Bay, but pleas to make the bumpers easier to spot after future accidents have been ignored.

Several pieces of black plastic weighing 15 tons each that were torn from the bumper system during the Cosco Busan collision floated several inches beneath the water, making the navigational hazards difficult for authorities to locate.

One of the pieces, a 20-foot chunk of metal-encrusted plastic, drifted out through the heavily trafficked Golden Gate before floating 20 miles south to Half Moon Bay, where it washed up on a remote stretch of Redondo Beach.
The Army Corps of Engineers, which is responsible for salvaging floating debris in the Bay, appealed publicly after the crash for brighter colors to be incorporated into the replaced bumper system to make the plastic easier to locate following accidents.

Caltrans has so far ignored those pleas.

**Bar pilot rules**

Changes affecting San Francisco bar pilots implemented after the Cosco Busan spill:

- Use of personal laptops with standardized electronic navigation software mandated to help pinpoint a vessel’s location without relying on onboard devices
- Shipping movements restricted in critical maneuvering areas when visibility falls to less than half a mile
- Third-party medical review and drug testing procedures implemented
- Increased oversight of pilots’ medical fitness instituted by the Board of Pilot Commissioners
- Internal training curriculum committee established to ensure use of the best technology available

*Source: San Francisco Bar Pilots Association*

**Details of the spill**

Environmental toll of the Cosco Busan crash:

- 2,525 Birds killed by the oil spill and recovered by authorities
- 418 Oil-covered birds rescued and rehabilitated
- 52 Miles of sandy beach coastline covered in oil
- 10 Miles of salt marsh coastline covered in oil
- 54,000 Gallons of fuel spilled
- 20,000 Gallons of oil recovered from water*

* Doesn’t include oil recovered from shorelines

*Sources: Natural Resource Damage Assessment and Restoration Planning for the Cosco Busan Oil Spill (October update), Coast Guard*

jupton@sfexaminer.com

*Examiner Staff Writer Tamara Barak Aparton contributed to this report.*

**Find this article at:**
**USCG SECTOR SAN FRANCISCO**

**PREVENTION / RESPONSE - SAN FRANCISCO HARBOR SAFETY STATISTICS**

**January-10**

### PORT SAFETY CATEGORIES

1. **Total Number of Port State Control Detentions for period:** 0
   - SOLAS (0), MARPOL (0), ISM (0), ISPS (0)

2. **Total Number of COTP Orders for the period:** 1
   - Navigation Safety (1), Port Safety & Security (0), ANOA (0)

3. **Marine Casualties (reportable CG 2692) within SF Bay:**
   - Allision (1), Collision (0), Fire (0), Grounding (0), Sinking (0), Steering (0), Propulsion (2), Personnel (1), Other (0)

4. **Total Number of (routine) Navigation Safety related issues / Letters of Deviation:** 3
   - Radar (2), Steering (0), Gyro (0), Echo sounder (0), AIS (1), AIS-835 (0), ARPA (0)

5. **Reported or Verified "Rule 9" or other Navigational Rule Violations within SF Bay:** 0

6. **Significant Waterway events or Navigation related cases for the period:** 0

7. **Maritime Safety Information Bulletins (MSIBs):** 0

### MARINE POLLUTION RESPONSE

**Total Oil/Hazmat Pollution Incidents within San Francisco Bay for Period**

**TOTAL VESSELS**

- U.S. Commercial Vessels: 1
- Foreign Freight Vessels: 1
- Public Vessels (Military): 1
- Commercial Fishing Vessels: 2
- Recreational Vessels: 9

**TOTAL FACILITIES**

- Regulated Waterfront Facilities: 0
- Regulated Waterfront Facilities - Fuel Transfer: 6
- Other Land Sources: 11

**OTHER SOURCES**

- Mystery Spills - Unknown Sources: 7
- Pollution Cases Requiring Clean-up: 5
- Federally Funded Cases: 2

**TOTAL OIL DISCHARGE AND HAZARDOUS MATERIALS RELEASE VOLUMES BY SPILL SIZE CATEGORY:** 38

1. Spills < 10 gallons: 22
2. Spills 10 - 100 gallons: 3
3. Spills 100 - 1000 gallons: 1
4. Spills > 1000 gallons: 0
5. Spills - Unknown: 12

**TOTAL OIL DISCHARGE AND/OR HAZARDOUS MATERIAL RELEASE VOLUMES (GALLONS):** 271

1. Estimated spill amount from U.S. Commercial Vessels: 3
2. Estimated spill amount from Foreign Freight Vessels: 1
3. Estimated spill amount from Public Vessels: 0
4. Estimated spill amount from Commercial Fishing Vessels: 2
5. Estimated spill amount from Recreational Vessels: 30.5
6. Estimated spill amount from Regulated Waterfront Facilities - Fuel Transfer: 0
7. Estimated spill amount from Other Land Sources: (+ 200 gallons of Sewage) 4.1
8. Estimated spill amount from Unknown sources: 225

**TOTAL PENALTY ACTIONS:**

- Civil Penalty Cases for Period: 0
- Notice of Violations (TKs): 1
- Letters of Warning: 5
## SIGNIFICANT PORT SAFETY AND SECURITY CASES

### MARINE CASUALTIES - PROPULSION/STEERING

**Marine Casualty- Loss of Propulsion, TUG MILLENNIUM FALCON (5 January):** While assisting the M/V HYUNDAI COLOMBO IVO Oakland Berth 30, one TUG lost propulsion for approximately 30 seconds. The other tug was able to assist the M/V HYUNDAI COLOMBO out of berth during their incident. Loss of propulsion was caused by the Z-Drive not being clutched in while they were being pushed backwards through the water. Engines were restarted and they were able to continue escorting the COLOMBO. Case Closed.

**Marine Casualty- Loss of Propulsion, TUG Z-THREE (5 January):** While assisting the M/V HYUNDAI COLOMBO IVO Oakland Berth 30, the tug lost propulsion. The M/V HYUNDAI COLOMBO had one tug onscene and the vsl was able to sail out of SF Bay without incident. Loss of propulsion was caused by a failed input shaft bearing forward of the clutch. Vsl was taken out of service for repairs. Case Pends.

**Marine Casualty- Allision, TUG COCHISE (6 January):** While the TUG was towing an empty barge from Richmond Terminal 1 to the Richmond Long Wharf, the tug allided with the Richmond Lighted Buoy #6. Vsl successfully completed the transit without incident. $1200 dollars worth of damage was caused to the buoy, no damage to the barge or tug. Case Pends.

### VESSEL SAFETY CONDITIONS

**NONE TO REPORT**

### GENERAL SAFETY/SECURITY CASES

**NONE TO REPORT**

### NAVIGATIONAL SAFETY

**Marine Casualty- COTP Order issued, M/V NIU POLYNESIA (5 January):** A COTP order was issued requiring a one tug escort while in San Francisco Bay due to the vessel's Loss of Propulsion history. Vsl transited into SF bay without incident. The COTP order was lifted for the outbound transit on January 8. Case Closed.

**Navigation Safety - LOD 10CM RADAR, M/V CHIOS VOYAGER (15 January):** Vsl was issued an inbound LOD for a malfunctioning 10CM radar. Tech report received, stating that the magnetron was replaced on January 17. Vsl departed SF Bay same day. Case closed.

**Navigation Safety - LOD AIS, M/V ZAANDAME (19 January):** Vsl was issued an outbound LOD for a malfunctioning AIS. Vsl left SF Bay without incident on 21 December. Case closed.

**Navigation Safety - LOD 3CM RADAR, M/V ZHEN HUA (21 January):** Vsl was issued an inbound LOD for a malfunctioning 3CM radar. Radar repaired, case Pends.

### SIGNIFICANT INCIDENT MANAGEMENT DIVISION CASES

**UNNAMED TUG -** Report of a sunken tugboat in the Petaluma River. Initial investigation revealed that the tug was outside of Coast Guard jurisdiction. IMD contacted the local EPA office and they worked with DFG to supervise the owner in raising his vessel. Vessel was removed from the river and salvaged.

**UNNAMED VESSEL -** Vessel was washed ashore in Tiburon as a cause of recent storms. IMD federalized case and removed 125 gallons of gas and three batteries.

**M/V OCEAN STAR -** Abandoned vessel at Spud Point Marina in Bodega Bay. Vessel had a potential of 650-700 gallons on board. Due to its condition IMD federalized the case to remove all oil and hazardous material on board.
Loss of Propulsion Incidents-SF Bay (Deep draft vsls, F/V, P/V)

Number of Incidents

VTS San Francisco Offshore Lane Transit Comparison Data

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**Raw Data:**

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</tbody>
</table>
1. CORPS FY 2010 O&M DREDGING PROGRAM

The following is this years O & M dredging program for San Francisco Bay.

a. **Main Ship Channel** – Surveyed at the end of July and posted. **No Change.**

b. **Richmond Outer Harbor (and Richmond Long Wharf)** – Dredging is complete to -35 feet MLLW. **No Change.**

c. **Richmond Inner Harbor** – Has been dredged to -38 feet MLLW. Post-dredge survey has not yet been scheduled. **No Change.**

d. **Oakland O & M Dredging** – Dredging of the Outer Harbor is complete. **No Change.**

e. **Suisun Bay Channel** – Dredging is completed. Post-dredge survey posted for New York Slough. **No Change.**

f. **Pinole Shoal** – Advanced maintenance dredging completed (-37+2 in selected locations). Post-dredge surveys are completed now. **No Change.**

g. **Redwood City/San Bruno Shoal** – Dredging is complete. **No major dredging for at least a year (mid 2011).**

h. **San Leandro Marina Channel** – Dredging completed. **No Change.**

2. DEBRIS REMOVAL – The debris total for Jan 2010 is 230 tons:

- Raccoon - 228 tons
- Safe Boat - 2 tons
- Grizzly - zero (not underway)

On Jan 19th a significant series of storms rolled threw the area in a 4 to 5 day period. Since then we have collected just under 20 tons of Hazards to Navigation per day and up to 36 tons a day.

We (the Corps) also handled several vessels that broke anchor and other debris that was brought to our docks from outside of the Sausalito area.
Mariners are advised that in these massive debris flow times, not all debris can be collected. Reports given to us and the USCG are processed for collection and information purposes. We can not always operate past duty hours due to crewing and overtime restrictions.

I advised the USCG Vessel Traffic Service that a general broadcast Security message for Hazards to Navigation would be a good idea. They then proceeded to report an hourly Security message for over a week, stating that hazards to navigation are hard to see, generally accumulate around tide lines and to use extreme caution when transiting the bay.

Heavy hazard collection efforts by the crew of the Raccoon lasted forever two weeks and into February, collecting many tons of debris, at times working overtime to do so. During our efforts we have recovered several large pilings with propeller strike marks from vessels running them over. (See pics.)

(Also with the help of our Public Affairs Office we have had 4 media events from on board the M/V Raccoon; Local Channels 2, 4, 5 and the National Geographic crew from "Worlds Largest Fixes" on board. WLF crew spent 2 days onboard the Raccoon.)

![Debris Removal Chart](image)

3. UNDERWAY OR UPCOMING HARBOR IMPROVEMENTS

**Oakland 50-ft Deepening Project** – The deepening project is officially completed. Since this project is now physically completed, this item will be taken out of the report.

4. EMERGENCY (URGENT & COMPELLING) DREDGING

There was no emergency dredging in FY 2009.
5. OTHER WORK

a. San Francisco Bay to Stockton  No additional money appropriated for 2010. This project is moving forward on carry-over money. No change.

b. Sacramento River Deep Water Ship Channel Deepening  The $2,000,000 was appropriate. The non-federal sponsor will be providing its portion of the cost of a quarterly basis. The Corps is scheduled to complete all studies by late 2011. No Change.

6. HYDROGRAPHIC SURVEY UPDATE

Address of Corps’ web site for completed hydrographic surveys:

http://www.spn.usace.army.mil/hydrosurvey/

Main Ship Channel: Survey completed in July 2009 has been posted.
Pinole Shoal: Post-dredge surveys completed January 5, 7 & 13 and condition surveys completed 21-24 January have been posted.
Suisun Bay Channel, New York Slough: Post-dredge survey completed in December 2009 has been posted.
Bull’s Head Channel: December 4 post-dredge survey has been posted.
Redwood City: Post-dredge survey completed November 2009 has been posted.
San Bruno Shoal: Surveys completed in May 2009 have been posted.
Oakland Entrance Channel: Surveys completed in August and September 2009 have been posted.
Oakland Inner Harbor Turning Basin: Composite condition surveys from December 2009 have been posted.
Brooklyn Basin South Channel (Inner Harbor) - Surveys completed in Sept. 2009 have been posted.
Oakland Outer Harbor: Surveys completed in July – Sept. 2009 have been posted.
Southampton Shoal and Richmond Long Wharf: Surveys completed in July 2009 have been posted.
Richmond Inner Harbor: Surveys completed in Sept. 2009 have been posted.
North Ship Channel: Surveys completed April 2009 have been posted.
San Leandro Marina: Surveys completed in November and December 2009 have been posted.
San Rafael Creek and San Rafael Across the Flats: Surveys completed April and May 2009 have been posted.
Larkspur Ferry Terminal: Survey completed 17-18 September, 2009 has been posted.
Mare Island Strait Channel: Surveys completed in August 2008 have been posted.
Alameda Naval Station Survey (Alameda Point Navigation Channel): Survey completed in May 2009 has been posted.
Disposition Site Condition Surveys:
    SF-09 (Carquinez) and SF-10 (San Pablo Bay) February 3, 2010 survey has been posted.
    SF-11 (Alcatraz): The February 4, 2010 survey has been posted. (-35.1)
San Francisco Clearinghouse Report

February 11, 2010

In January the clearinghouse did not call OSPR regarding any possible escort violations.

In January the clearinghouse did not receive any notifications of vessels arriving at the Pilot Station without escort paperwork.


In January there were 87 tank vessels arrivals; 5 Chemical Tankers, 15 Chemical/Oil Tankers, 18 Crude Oil Tankers, 1 LPG, 14 Product Tankers, and 34 tugs with barges.

In January there were 259 total arrivals.
San Francisco Bay Clearinghouse Report For January 2010

**San Francisco Bay Region Totals**

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tanker arrivals to SF Bay</td>
<td>53</td>
<td>91</td>
</tr>
<tr>
<td>Barge arrivals to SF Bay</td>
<td>34</td>
<td>39</td>
</tr>
<tr>
<td>Total Tanker and Barge Arrivals</td>
<td>87</td>
<td>130</td>
</tr>
</tbody>
</table>

**Total tank ship & tank barge movements**

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank ship movements</td>
<td>162</td>
<td>313</td>
</tr>
<tr>
<td>Escorted tank ship movements</td>
<td>79</td>
<td>153</td>
</tr>
<tr>
<td>Unescorted tank ship movements</td>
<td>83</td>
<td>160</td>
</tr>
<tr>
<td>Tank barge movements</td>
<td>128</td>
<td>189</td>
</tr>
<tr>
<td>Escorted tank barge movements</td>
<td>63</td>
<td>83</td>
</tr>
<tr>
<td>Unescorted tank barge movements</td>
<td>65</td>
<td>106</td>
</tr>
</tbody>
</table>

Percentages above are percent of total tank ship & tank barge movements for each item.

**Escorts reported to OSPR**

|                      | 0    | 2             |

**Movements by Zone**

<table>
<thead>
<tr>
<th>Movements by Zone</th>
<th>Zone 1</th>
<th>%</th>
<th>Zone 2</th>
<th>%</th>
<th>Zone 4</th>
<th>%</th>
<th>Zone 6</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total movements</td>
<td>173</td>
<td>278</td>
<td>0</td>
<td>116</td>
<td>567</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unescorted movements</td>
<td>107</td>
<td>161</td>
<td>0</td>
<td>58</td>
<td>326</td>
<td>57.50%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tank ships</td>
<td>53</td>
<td>78</td>
<td>0</td>
<td>31</td>
<td>162</td>
<td>28.57%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tank barges</td>
<td>54</td>
<td>83</td>
<td>0</td>
<td>27</td>
<td>164</td>
<td>28.92%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escorted movements</td>
<td>66</td>
<td>117</td>
<td>0</td>
<td>58</td>
<td>241</td>
<td>42.50%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tank ships</td>
<td>39</td>
<td>58</td>
<td>0</td>
<td>29</td>
<td>126</td>
<td>22.22%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tank barges</td>
<td>27</td>
<td>59</td>
<td>0</td>
<td>29</td>
<td>115</td>
<td>20.28%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. Information is only noted for zones where escorts are required.
2. All percentages are percent of total movements for the zone.
3. Every movement is counted in each zone transited during the movement.
4. Total movements is the total of all unescorted movements and all escorted movements.
### VESSEL TRANSFERS

<table>
<thead>
<tr>
<th></th>
<th>Total Transfers</th>
<th>Total Vessel Monitors</th>
<th>Total Transfer Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JANUARY 1 - 31, 2009</strong></td>
<td>288</td>
<td>138</td>
<td>47.92</td>
</tr>
<tr>
<td><strong>JANUARY 1 - 31, 2010</strong></td>
<td>198</td>
<td>82</td>
<td>41.41</td>
</tr>
</tbody>
</table>

### CRUDE OIL / PRODUCT TOTALS

<table>
<thead>
<tr>
<th></th>
<th>Crude Oil ( D )</th>
<th>Crude Oil ( L )</th>
<th>Overall Product ( D )</th>
<th>Overall Product ( L )</th>
<th>GRAND TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JANUARY 1 - 31, 2009</strong></td>
<td>15,735,000</td>
<td>23,401,000</td>
<td>13,158,469</td>
<td>36,559,469</td>
<td></td>
</tr>
<tr>
<td><strong>JANUARY 1 - 31, 2010</strong></td>
<td>9,981,669</td>
<td>15,210,539</td>
<td>10,510,899</td>
<td>25,721,438</td>
<td></td>
</tr>
</tbody>
</table>

### OIL SPILL TOTAL

<table>
<thead>
<tr>
<th></th>
<th>Terminal</th>
<th>Vessel</th>
<th>Facility</th>
<th>Total</th>
<th>Gallons Spilled</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JANUARY 1 - 31, 2009</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>JANUARY 1 - 31, 2010</strong></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>Fuel Oil / 1 gal</td>
</tr>
</tbody>
</table>

*** Disclaimer:
Please understand that the data is provided to the California State Lands Commission from a variety of sources; the Commission cannot guarantee the validity of the data provided to it.

Generated by: MRA 2/9/2010
CSLC NCFO
Port of San Francisco
February 11, 2010

California Environmental Protection Agency

ARB OGV Clean Fuel Rule Update
ARB OGV Clean Fuel Rule
Essential Modifications Exemption
Applications Summary*

Total number of applications received: 441 vessels
Number of applications pending: 33 vessels
Total number of applications completed: 408 vessels
Number of completed applications approved: 354
Number of completed applications with partial approvals: 54 vessels**

*Summary from July 1, 2009 to February 8, 2010.
**Includes denial of 54 main engine requests and 3 auxiliary engine requests and approval of all accompanying auxiliary boiler requests.
**Summary of Safety Exemptions & Noncompliance Fees**

<table>
<thead>
<tr>
<th>Vessel Type</th>
<th>Reason for Exemption Request</th>
<th>Date Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Exemptions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanker</td>
<td>Insufficient fuel quantity due to unexpected length of stay within regulatory zone</td>
<td>7/2/2009</td>
</tr>
<tr>
<td>Containership</td>
<td>Excessive fuel leakage in fuel system</td>
<td>8/9/2009</td>
</tr>
<tr>
<td>Tanker</td>
<td>Auxiliary boiler operation problems</td>
<td>8/24/2009</td>
</tr>
<tr>
<td>Tanker</td>
<td>Fuel switchover problems</td>
<td>9/17/2009</td>
</tr>
<tr>
<td>Tanker</td>
<td>Fuel switchover problems</td>
<td>10/14/2009</td>
</tr>
<tr>
<td>Tanker</td>
<td>Vessel running on four cylinders (one fuel pump lifted)</td>
<td>11/9/2009</td>
</tr>
<tr>
<td>Cruise Ship</td>
<td>Severe weather conditions</td>
<td>12/9/2009</td>
</tr>
</tbody>
</table>

*Summary from July 1, 2009 to February 8, 2010*
### ARB OGV Clean Fuel Rule

**Safety Exemptions & Noncompliance Fees Continued**

<table>
<thead>
<tr>
<th>Vessel Type</th>
<th>Reason for Exemption Request</th>
<th>Date Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Exemptions</td>
<td>Fuel viscosity control equipment failure prior to fuel switch</td>
<td>12/24/09</td>
</tr>
<tr>
<td>Containership</td>
<td>COPT screening for prior LOP during astern start</td>
<td>12/30/09</td>
</tr>
<tr>
<td>Cruise Ship</td>
<td>Severe weather conditions (inbound only)</td>
<td>1/21/2010</td>
</tr>
<tr>
<td>Containership</td>
<td>Severe weather conditions (inbound only)</td>
<td>1/21/2010</td>
</tr>
<tr>
<td>Containership</td>
<td>Severe weather conditions</td>
<td>1/21/2010</td>
</tr>
<tr>
<td>Cruise Ship</td>
<td>Severe weather conditions (inbound only)</td>
<td>1/22/2010</td>
</tr>
<tr>
<td>Tanker</td>
<td>Difficult starting dead slow ahead or astern. Excessive fuel pump wear.</td>
<td>1/28/2010</td>
</tr>
<tr>
<td>Noncompliance Fees</td>
<td>Unplanned Redirection to CA (paid $45,500)</td>
<td>10/21/2009</td>
</tr>
</tbody>
</table>

*Summary from July 1, 2009 to February 8, 2010*
ARB OGV Clean Fuel Rule
Status of On-going Efforts to Investigate Operational Issues

- Contract with California Maritime Academy to investigate root causes of operational issues
  - Root cause analysis underway
  - CMA meeting with engine manufacturers, USCG, class societies and owner/operators
  - Reviewing survey data, pilot reports and USCG incident data

- Maritime Technical Working Group meeting tentatively scheduled for April 5, 2010
ARB OGV Clean Fuel Rule
Contact Information

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http://www.arb.ca.gov/marine
February 11, 2010

TO: Harbor Safety Committee  
FROM: Captain Bruce Horton  
RE: January 28, 2010 Navigation Work Group Meeting

It has been brought to the attention of the work group that MARAD is starting to contract out for the removal of ships from the Suisun Bay Reserve Fleet. Concern was raised that a dead ship tow going under the Union Pacific Railroad bridge requires extreme caution to not damage the bridge structure in the strong currents at the Carquinez Strait. The UP Railroad bridge is a vital artery for the movement of cargo into and out of the Ports of Oakland, Sacramento and Stockton, as well as carrying passengers on Amtrak.

We believe that the USCG has to have all the information available on each dead ship tow, so they can make an informed decision and insure the safest passage plan possible.

Therefore, because of the critical role of the waterway and the railway to the state of California, the Work Group recommends that:

“The Harbor Safety Committee send a letter to the Coast Guard Captain of the Port requesting that safety plans be required for all dead ship tows that sail under the Union Pacific Railroad Bridge.”
Feb. 11, 2010

Re: Study of Realignment of San Pablo Bay and North Ship Channels

Dear Lt. Colonel Farrell,

On behalf of the Harbor Safety Committee of the San Francisco Bay Region, I am writing to request that the U.S. Army Corp of Engineers work with the U.S. Coast Guard, the San Francisco Harbor Safety Committee’s, Navigation and Dredge Work Groups, and NOAA to study, design, and implement realignment of the following channels in San Francisco and San Pablo Bay.

1. Pinole Shoal Channel east of buoys 7 and 8 towards the North side of the “E” buoy.

2. North Ship Channel from the San Rafael Bridge South to Pt. Chauncey and create a 600’ wide federally maintained channel.

The purpose of realignment is to take advantage of naturally occurring deep water, straighten the shipping channels, and reduce the amount of dredging needed each budget cycle to maintain the width, slope and project depth. Realignment of the channels will reduce the dredge imprint on the bay and provide long term economic and health benefits to Ports and Terminals, the Environment and the surrounding communities. Users of the waterways will be able to count on channels being maintained at proper depth and width throughout the year, which in turn will allow voyage planners to maximize the cargo carrying capacity of their ships and use fewer vessels to move the same amount of cargo. Increased vessel efficiency will reduce vessel transits resulting in cleaner air for California and reduce the possibility of groundings from silting channels.

Sincerely,

Joan Lundstrom, Chair

Harbor Safety Committee of the
San Francisco Bay Region
January 20, 2010

To: Parties Interested in Serving on the San Francisco Bay Region Harbor Safety Committee

Subject: Harbor Safety Committee Member Vacancy

The Office of Spill Prevention and Response (OSPR) is announcing an upcoming opening on the Harbor Safety Committee for a member representing the following Organization:

- Dry Cargo Vessel Operator

Qualified persons representing the above organization located in the San Francisco Bay Area are encouraged to apply. Applications for the position must be post marked no later than March 1, 2010. OSPR intends to appoint the representative member on or before March 8, 2010.

For the electronic version of the application, visit the OSPR website at http://www.dfg.ca.gov/ospr/reg_com/forms/msb/hs/appform.pdf. Applicants must complete this form and attach a current resume which indicates their qualifications. Additionally, provide a copy of your U.S. Coast Guard Merchant Marine Deck Officer's License, if using such a license to qualify. Mail application materials to:

Mr. Gary Toledo
Office of Spill Prevention and Response
P.O. Box 944209
Sacramento, California  94244-2090

Questions regarding the position, requirements or the application process may be directed to Mr. Gary Toledo at the above mailing address, e-mail address gtoledo@ospr.dfg.ca.gov, or telephone number (916) 324-6450. We look forward to hearing from qualified applicants.