

# Harbor Safety Committee

of the San Francisco Bay Region

*Mandated by the California Oil Spill  
Prevention and Response Act of 1990*

## Harbor Safety Committee of the San Francisco Bay Region

Thursday, March 13, 2008

Pier 1 Conference Center, Port of San Francisco, San Francisco, California

**Joan Lundstrom**, Chair of the Harbor Safety Committee of the San Francisco Bay Region (HSC), Bay Area Conservation and Development Commission (BCDC); called the meeting to order at 1010. **Alan Steinbrugge**, Marine Exchange of the San Francisco Bay Region (Marine Exchange), confirmed a quorum of the HSC.

The following committee members (M) and alternates (A) were in attendance: **Capt. Esam Amso** (A), Valero Marketing and Supply Company; **Capt. Marc Bayer** (M), Tesoro Refining & Marketing Company; **John Berge** (M), Pacific Merchant Shipping Association, (PMSA); **Ted Blanckenburg** (A), AMNAV Maritime Services; **Margot Brown** (M), National Boating Federation; **Warner Chabot** (M), Ocean Conservancy; **Ron Chamberlain** (M), Port of Benicia; **Capt. John Cronin** (M), Matson Navigation Company; **John Davey** (A); Port of San Francisco; **Capt Paul Gugg** (M), United States Coast Guard (USCG); **Capt. Fred Henning** (M), Baydelta Maritime; **Capt. Bruce Horton** (M), San Francisco Bar Pilots (Bar Pilots); **Robert J. Lawrence** (M), U.S. Army Corps of Engineers (COE); **Daniel J. Massey** (A), Foss Maritime Company; **Capt. Peter McIsacc** (A), Bar Pilots; **Michael McMillan** (A), Port of Oakland; **Pat Murphy** (M); Blue & Gold Fleet; **Richard Nagasaki** (A), Chevron Shipping Company; **William Nickson** (A), Transmarine Navigation Corporation; **Sara Randall** (M), Institute for Fisheries Resources; **Linda Scourtis** (A), BCDC; **Capt. Ray Shipway** (A), International Organization of Masters, Mates, & Pilots; **Keith Stahnke** (A), San Francisco Bay Area Water Transit Authority (WTA); **Gerry Wheaton** (M), National Oceanic and Atmospheric Administration (NOAA); **Tom Wilson** (M), Port of Richmond.

Also present and reporting to the HSC were **Bob Chedsey**, California State Lands Commission (State Lands); **Capt. Lynn Korwatch**, Marine Exchange; **Lt. Cmdr. Kevin Mohr**, USCG; **Dave Sulouff**, USCG, **Capt. Gary Toledo**, California Office of Spill Prevention and Response, (OSPR).

The meetings are always open to the public.

### Approval of the Minutes

There were no corrections to the minutes of the meeting of February 14, 2008. A motion to accept the minutes was made and passed without discussion or dissent.

### Comments by the Chair – Lundstrom

- The briefing on bridge fenders was rescheduled for the April meeting due to the number of votes on the meeting's agenda. The brief from **Stahnke** on the Water Emergency Transportation Authority is pending

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until after they set up a board of directors. Due to the interest expressed by those present, **Lundstrom** said that the Coast Guard would be invited to give a brief on the *COSCO Busan* allision at the May meeting.

### Coast Guard Report – Capt. Gugg

**Lt. Cmdr. Mohr** read from a report attached to these minutes.

- It would not be possible to give a report on the *Orange Sun's* collision with the dredge *NewYork* until the Coast Guard investigation is complete.

**Sulouff** reported on topics raised under new business at the February meeting

- All of the broken radar beacons (RACONS) on local bridges had been repaired with new units or upgraded one. Bridge owners now have spares on hand to fix broke RACON's more quickly. The bridge owners were very cooperative. He encouraged everyone to report any problems to him or through the Vessel Traffic Service (VTS).
- A meeting was scheduled with Southern Pacific Railroad in the third week of March to discuss to placement of a Physical Oceanographic Real Time System (PORTS) wind sensor on their drawbridge.

**Wheaton** encouraged rapid progress on the sensor for the drawbridge because the NOAA teams that do that work would be heading to Alaska for the summer. **Wheaton** then asked when the Coast Guard's final report on the *COSCO Busan* allision would be ready. **Cmdr. Andrew Wood**, Coast Guard, said that there was no firm date because the report had to make its way through the chain of command.

**Berge** asked if Southern Pacific would use the PORTS sensor or their own to determine operations of the drawbridge. **Capt. Bayer** said that Southern Pacific would rely on their sensor until convinced by experience with the PORTS sensor.

**Lundstrom** thanked **Sulouff** for the quick response to the RACON issue and the help on the PORTS wind sensor.

### Clearinghouse Report – Steinbrugge

**Steinbrugge** read from a report that is attached to these minutes.

**Capt. Bayer** asked why the numbers in the report seemed higher. **Steinbrugge** said that the Exchange was tracking more movements with its new software application. **Lundstrom** asked **Steinbrugge** to plan the appropriate update or footnotes for the next edition of the *Harbor Safety Plan*. **Capt. Toledo** asked **Steinbrugge** to divide barges and vessels for future reports.

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### OSPR Report – Capt. Toledo

- OPSR would soon need to know who would be attending the National Harbor Safety Committee conference on behalf of the HSC and the Exchange so that it could start the required reimbursement paper work.
- A guidance memo for the HSC and work groups on the best practices task had been prepared and was part of the handout package for the meeting. **Lundstrom** said that there might be questions or comments. **Capt. Toledo** encouraged all to contact him about the memo.
- There would be vacancies for tanker operator representatives as of the May meeting. The alternate representative for non-profit environmental groups will be **Jennifer Kovecses**, San Francisco Baykeeper. The new primary representative for the Port of San Francisco will be **Jay Ach**.

### NOAA Report – Wheaton

- **Dave Reynolds**, National Weather Service, will be able to brief the HSC in April about changes to *Coast Pilot 7* as a result of his research on Bay Area micro-climates.

### Army Corp of Engineers (COE) Report – Lawrence

**Lawrence** read from a report that is attached to these minutes.

**Lawrence** said that the colonel in charge of the local office would attend the April meeting of the HSC and asked what issues he might anticipate. **Lundstrom** said an agreement to release preliminary survey data where there had been a loss of depth would certainly come up. **Capt. Bayer** said the request for historic data on dredging of Pinole Shoal Channel would also be likely to come up.

After further discussion about survey data, **Lundstrom** asked **Capt. Bayer** to setup a meeting with the colonel, and representatives of the Coast Guard, Bar Pilots, and other stake holders.

### State Lands Commission Report – Chedsey

**Chedsey** read from a report that is attached to these minutes.

### Tug Escort Work Group – Capt. Henning

- **Capt. Henning** presented draft recommendations that resulted from the work group's discussion of the *COSCO Busan* allision, and as guided by Governor Schwarzenegger's directive to examine "any action necessary to prevent this from ever happening again." The topics looked at were: 1. whether the tug tethered to the *COSCO Busan* could have affected the outcome. 2. Should tugs be evaluated for navigational assistance in limited visibility? 3. Should all vessels over sixteen hundred gross tons should have tug escort?

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- In response to the first topic the group concluded that an escort tug could not have altered the circumstances.
- In response to the second topic the group concluded that the risk of “using an escort tug as a “leader” in limited visibility outweigh[ed] potential benefits.
- In response to the third topic the group concluded that there was no need for further regulation since the Coast Guard “Captain of The Port has sufficient authority to mandate tug escorts for particular ships.”

Members of the HSC made suggestions on matters of form and style that were agreed to by consensus since there was no dissent.

**Chabot** said that the findings in topic three should more clearly cite or refer to specific HSC studies or other work that was used to support the conclusion. He said that state legislature was likely to continue efforts to require tug escort for more vessels and added that it would be useful if there were specific supporting documents that people could lay their hands on when they discussed the topic again. **Lundstrom** said that the product is in previous reports from the workgroups. **Brown** said that it might invite nit-picking of topic three if it included a lot of support material.

After further discussion, **Lundstrom** suggested that topic three be tabled and referred back to the Tug Escort Workgroup and asked if the committee were ready to vote on topics one and two. Since there was no dissent, **Lundstrom** call for a motion to vote on topics one and two as amended. The motion was made, seconded, and passed unanimously.

### Navigation Work Group – Capt. Horton

- **Capt. Horton** presented draft recommendations that resulted from the work group’s meetings to discuss the *COSCO Busan* allision, and as guided by Governor Schwarzenegger’s directive to examine “any action necessary to prevent this from ever happening again.” The group made four recommendations:
  - 1. Guidelines for navigation in reduced visibility that were developed between the Coast Guard and Bar Pilots should be adopted by the HSC as best practices and included in the *Harbor Safety Plan*.
  - 2. Recommended that the HSC consider drafting reduced visibility guidelines for vessels less than sixteen hundred gross tons.
  - 3. Recommended that the HSC should review any adopted guidelines after one year.
  - 4. Recommended that the HSC should study the capacity and management issues of Coast Guard designated anchorages in the Bay Area.

**Capt. Bayer** asked that written comments from SeaRiver and those emailed from **Capt. Robert F. Weeks**, Chevron, be entered into the minutes.

SeaRiver:

- Geographic areas where anchoring is not an option should be considered.

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- Keeping a dock/berth occupied when visibility [is reduced] may have other repercussions *i.e.*, vessels may be forced to remain at the berth or held out waiting for tide for extended periods of time in excess of a tidal cycle.
- The master with the pilot must continue to have the final say.
- Ensure that the master and pilot are not penalized for continuing on a passage when the threshold limits are met.

### **Capt Weeks:**

- It's premature and makes its conclusions in isolation of other ongoing investigations which could significantly affect the outcome.
- The document is more of a travelogue than a technical document and is largely non-specific on technical matters in which the harbor safety committee has access to much information.
- The document does not provide clear and unambiguous guidance on what should be done, nor does it conclude how the visibility should be determined for various points along the route given that the report quotes the uncertainties of knowing that.
- No written effort was made in assessing the change which occurs in viewing a harbor by radar and the lack of navigationally distinctive features to ensure ready differentiation of safe passage through bridges.
- No written assessment was made of available technology which may help in reduced visibility.
- No comment was made on competencies to handle ships in reduced visibilities.
- An unrealistic cutoff of sixteen hundred tons was used/ Tug and barge traffic is frequently handled by tug masters whose license is for three hundred tons only, and yet the unit they handle can be highly sensitive and as much as forty thousand tons. The authors recommend a later study to be made.

**Capt. Gugg** thanked **Capt. Bayer** for the comments and said that the process is just beginning. **Berge** said that PMSA has similar concerns to those expressed but feel it is good to keep moving ahead. Berge added that there needs to be a method to address changing technology. **Lundstrom** said that is being investigated by the State Board of Pilot Commissioners. **Capt. Horton** said that there is no standard to the technology and that there are a large number of diverse applications.

**Lundstrom** asked if the workgroup would be agreeable to amend their recommendations with a fifth to assess technology. There was no dissent.

**Capt. Bayer** asked if it was premature to make recommendations without the results of the other investigations. **Capt. Horton** said that the conclusions were based on ongoing discussions between the Bar Pilots and Coast Guard rather than on anything to do with the *COSCO Busan* allision.

**Lundstrom** called for a vote on the recommendations as amended. A motion was made, seconded, and passed to include point #5; Recommended the HSC assess the use of and advises in navigational aid technology to improve safe transits.

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### Prevention Though People Work Group – Brown

- **Brown** presented draft recommendations that resulted from the work group’s meetings to discuss the *COSCO Busan* allision, and as guided by Governor Schwarzenegger’s directive to examine “any action necessary to prevent this from ever happening again.” The group came to three conclusions:
  - “. . . that it is unlikely VTS direction could have prevented the allision, given the inertia of the 900-foot vessel and the limited time period when it became apparent that the vessel was off course. . .”
  - “The Work Group concludes that adequate Coast Guard authority to regulate shipping and control vessel movements already exists in current law.”
  - “The Work Group supports the current effort of the San Francisco Bar Pilots, the Harbor Safety Committee . . . and the Coast Guard to clarify procedures for operating vessels during restricted visibility.”

Members of the HSC and public made suggestions on matters of form and style that were agreed to by consensus since there was no dissent. **Lundstrom** called for a vote on the recommendations as amended. A motion was made, seconded, and passed unanimously.

### Ferry Operations Work Group – Davey

There was nothing to report.

### PORTS Work Group – Capt. Bayer

There was nothing to report

### Plan Update Work Group – Scourtis

- There efforts have been delayed by the effort going into the *COSCO Busan* response.

### PORTS Report – Steinbrugge

- The Coast Guard has provided a buoy that will be used for sensor installation in Southampton Shoal channel.

### Public Comment

A person suggested that the word *assist* be substituted for *escort* when talking about tugs in the finding and conclusions of the workgroups.

### Old Business

There was no old business.

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## **New Business**

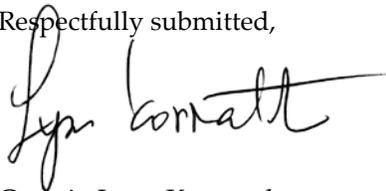
**Capt. Korwatch** encouraged everyone to provide input on the current grant available from TSA. There would be a more detailed presentation at the next meeting of the Coast Guard AMSC.

**Capt. Gugg** presented **Steinbrugge** with a Sector San Francisco coin in recognition of his effort to acquire the buoy for PORTS.

## **Adjournment**

**Lundstrom** tabled the meeting at 1220

Respectfully submitted,



Captain Lynn Korwatch  
Executive Secretary

<b>USCG SECTOR SAN FRANCISCO</b>	
<b>PREVENTION / RESPONSE - SAN FRANCISCO HARBOR SAFETY STATISTICS</b>	
<b>February-08</b>	
<b>PORT SAFETY CATEGORIES</b>	
	<b>TOTAL</b>
<b>Total Port Safety (PS) Cases opened for the period:</b>	<b>10</b>
<b>1. Total Number of Port State Control Detentions for period:</b>	<b>1</b>
SOLAS (1), MARPOL (0), ISM (0), ISPS (0)	
<b>2. Total Number of COTP Orders for the period:</b>	<b>3</b>
Navigation Safety (2), Port Safety & Security (1), ANOA (0)	
<b>3. Marine Casualties (reportable CG 2692) within SF Bay: Allison (0), Collision (0), Fire (0),</b>	<b>3</b>
Grounding (0), Sinking (0), Steering (1), Propulsion (1), Personnel (1), Other (0)	
<b>4. Total Number of (routine) Navigation Safety related issues / Letters of Deviation</b>	<b>3</b>
Radar (2), Steering (0), Gyro (0), Echo sounder (1), AIS (0), AIS-835 (0)	
<b>5. Reported or Verified "Rule 9" or other Navigational Rule Violations within SF Bay</b>	<b>0</b>
<b>6. Significant Waterway events or Navigation related cases for the period:</b>	<b>0</b>
<b>7. Maritime Safety Information Bulletins (MSIBs): MSIB 06-05</b>	<b>0</b>
<b>MARINE POLLUTION RESPONSE</b>	
	<b>TOTAL</b>
<b>Total Oil/Hazmat Pollution Incidents within San Francisco Bay for Period</b>	<b>26</b>
<b>* Source Identification (Discharges and potential Discharges):</b>	
<b>TOTAL VESSELS</b>	<b>2</b>
Commercial Vessels	<b>0</b>
Public Vessels (Military)	<b>0</b>
Commercial Fishing Vessels	<b>0</b>
Recreational Vessels	<b>2</b>
<b>TOTAL FACILITIES</b>	<b>4</b>
Regulated Waterfront Facilities	<b>4</b>
Other Land Sources	<b>0</b>
<b>UNKNOWN/UNCONFIRMED</b>	<b>20</b>
<b>*Spill Information</b>	
Pollution Cases Requiring Clean-up	<b>3</b>
Federally Funded Cases	<b>0</b>
<b>Oil Discharge and Hazardous Materials Release Volumes by Spill Size Category:</b>	
1. Spills < 10 gallons	<b>11</b>
2. Spills 10 - 100 gallons	<b>1</b>
3. Spills 100 - 1000 gallons	<b>0</b>
4. Spills > 1000 gallons	<b>0</b>
5. Spills - Unknown	<b>14</b>
<b>Total Oil Discharge and/or Hazardous Material release volumes:</b>	<b>90</b>
1. Estimated spill amount from Commercial Vessels:	<b>0</b>
2. Estimated spill amount from Public Vessels:	<b>0</b>
3. Estimated spill amount from Commercial Fishing Vessels:	<b>0</b>
4. Estimated spill amount from Recreational Vessels:	<b>20</b>
5. Estimated spill amount from Regulated Waterfront Facilities:	<b>20</b>
6. Estimated spill amount from Other Land Sources:	<b>0</b>
7. Estimated spill amount from Unknown sources:	<b>50</b>
<b>Penalty Action:</b>	
Civil Penalty Cases for Period	<b>0</b>
Notice of Violations (TKs)	<b>1</b>
Letters of Warning	<b>1</b>

<b>** SIGNIFICANT PORT SAFETY &amp; SECURITY (PSS) CASES **</b>	
<b>* A. MARINE CASUALTIES - PROPULSION / STEERING</b>	
<b>Marine Casualty - Loss of Steering, M/V FR8 ENDEAVOUR (2 Feb):</b> While making its inbound approach to the Golden Gate Bridge, the vessel reported a failure of its starboard hydraulic steering pump, but was able to shift to its port pump and steer the vessel without incident. A COTP order was issued requiring vessel to have one assist tug for its transit to Richmond and to make repairs made prior to departure. On 5 Feb repairs were made, the pump was tested satisfactorily, and the COTP order was lifted.	
<b>Marine Casualty - Loss of Propulsion, M/V WILLIAMSBURG BRIDGE (13 Feb):</b> Vessel lost main propulsion while transiting into San Francisco Bay north of Aquatic Park. Vessel anchored safely and was issued a COTP order to proceed to Anchorage 9 with assist tugs until repairs were made. Vessel lost power due to an air leak on the number 1 and 4 cylinders which caused a loss of starting air pressure. The cylinder covers were replaced, which corrected the problem. The vessel's classification society attested to the repairs and the COTP order was lifted.	
<b>* B. MARINE CASUALTIES - VESSEL SAFETY CONDITIONS</b>	
<b>Marine Casualty - Crewmember Injury, Tug GOLIAH (2 Feb):</b> While retrieving messenger lines from freight ship MAERSK MYKONOS, a crewmember fell down two steps on the starboard side of the tug while mooring up the freight ship at the Oakland Outer Harbor. The crewmember was transported to a local medical center with lacerations to the face, a shattered bone under his right eye, and a minor concussion. Crewmember was later released and placed on a limited work schedule. Drug and alcohol tests were negative.	
<b>* C. COAST GUARD - GENERAL SAFETY/SECURITY CASES</b>	
<b>General Safety - M/V GLOBAL DREAM (5 Feb):</b> While conducting a Port State Control inspection, Coast Guard marine inspectors identified safety and environmental protection deficiencies that were required to be addressed prior to departure. Deficiencies included a ballast tank hatch cover leaking water onto the deck, accommodation space doors that could not be unlocked from the outside, and improper storage of food waste. The vessel was detained in the Port of Sacramento until the deficiencies were addressed to the satisfaction of the attending Coast Guard marine inspector and the vessel's classification society. On 8 Feb the deficiencies were corrected and the COTP order was lifted.	
<b>* D. COAST GUARD - NAVIGATIONAL SAFETY</b>	
<b>Navigation Safety - M/V HANJIN BRUSSELS (17 Feb):</b> Vessel's echo depth sounder was reported inoperable during its inbound transit. An inbound LOD was issued as well as an outbound LOD due to the vessel's plans on repairing the echo depth sounder in at its next scheduled port in LA/LB. Vessel safely departed on 24 Feb.	
<b>Navigation Safety - M/V ORIENTE NOBLE (21 Feb):</b> Vessel reported an inoperable 10 cm, s-band radar and was issued an inbound LOD while transiting to Port of San Francisco. On 24 Feb, the repairs were verified and the vessel was allowed to depart.	
<b>Navigation Safety - M/V PUDU (29 Feb):</b> Vessel reported an inoperable 10cm, s-band radar and was issued an inbound LOD while transiting to the Port of San Francisco. On 3 Mar, the repairs were verified and the vessel was allowed to depart.	
<b>SIGNIFICANT INCIDENT MANAGEMENT DIVISION (IMD) CASES:</b>	
<b>None.</b>	
<b>SIGNIFICANT PORT SAFETY INFORMATION or EXERCISES</b>	
<b>None.</b>	
<b>Follow-Up Cases:</b>	
<b>Grounding - P/V ROYAL PRINCE (07 Dec):</b> In the December CG report we reported that while the master of the passenger vessel ROYAL PRINCE was maneuvering his vessel during a sight-seeing voyage, the vessel drifted until it was only 25-40 feet from Alcatraz Island. Once the master realized his relative position to the island he placed the engines in full astern and grounded the vessel on its port side. Upon further investigation it was determined that the captain fell asleep while operating the vessel. The captain is facing charges against his license for falling asleep while operating a passenger vessel and choosing to get underway without the appropriate rest.	
<b>Allision - M/V ORANGE SUN and Dredge Barge NEW YORK near Newark, NJ (24 Jan):</b> While transiting outbound from Berth 24 in Newark, the M/V ORANGE SUN allided with the spudded dredge barge NEW YORK. Following the allision the dredge barge NEW YORK became partially submerged, which resulted in approximately 150 gallons of mixed petroleum product discharged. The M/V ORANGE SUN immediately anchored in the vicinity and was placed under a COTP order requiring the vessel to undergo inspections from CG and the vessel's classification society. On 27 Jan the vessel satisfied the outstanding requirements and the COTP order was lifted. The cause of the incident is still under investigation. Case pends.	



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San Francisco Bay Region  
Tank Vessel Escort Clearing House

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c/o Marine Exchange of the San Francisco Bay Region  
Fort Mason Center, Building B, Suite 325  
San Francisco, California 94123-1308

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## San Francisco Clearinghouse Report

March 13, 2008

- ❖ In February the clearinghouse did not contact OSPR regarding any possible escort violations.
- ❖ In February the clearinghouse did not receive any notifications of vessels arriving at the Pilot Station without escort paperwork.
- ❖ The Clearinghouse has not had to contact OSPR in 2008 about any possible escort violations. The Clearinghouse do call 9 times in 2007, 9 times in 2006; 16 times in 2005; 24 times in 2004; twice in 2003; twice in 2002; 6 times in 2001; 5 times in 2000.
- ❖ In February there were 112 tank vessels arrivals; 2 LPG's, 7 Chemical Tankers, 9 Chemical/Oil Carriers, 29 Crude Oil Tankers, 19 Product Tankers, plus 46 tugs with barges.
- ❖ In February there were 317 total arrivals.

# San Francisco Bay Clearinghouse Report For February 2008

## San Francisco Bay Region Totals

		<u>2007</u>
Tanker arrivals to San Francisco Bay	66	62 <i>(before 2008 barge arrivals were not totaled)</i>
Barge arrivals to San Francisco Bay	46	
Total Tanker and Barge Arrivals	112	
Tank ship movements & escorted barge movements	391	203
Tank ship movements	200	96
Escorted tank ship movements	104	59
Unescorted tank ship movements	96	37
Tank barge movements	191	107
Escorted tank barge movements	86	67
Unescorted tank barge movements	105	40

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

Escorts reported to OSPR 0 6

<b>Movements by Zone</b>	<b>Zone 1</b>	<b>%</b>	<b>Zone 2</b>	<b>%</b>	<b>Zone 4</b>	<b>%</b>	<b>Zone 6</b>	<b>%</b>	<b>Total</b>	<b>%</b>
Total movements	207		363		0		184		754	
Unescorted movements	99	47.83%	184	50.69%	0	0.00%	90	48.91%	373	49.47%
Tank ships	59	28.50%	95	26.17%	0	0.00%	38	20.65%	192	25.46%
Tank barges	40	19.32%	89	24.52%	0	0.00%	52	28.26%	181	24.01%
Escorted movements	108	52.17%	179	49.31%	0	0.00%	94	51.09%	381	50.53%
Tank ships	62	29.95%	102	28.10%	0	0.00%	41	22.28%	205	27.19%
Tank barges	46	22.22%	77	21.21%	0	0.00%	53	28.80%	176	23.34%

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.

# San Francisco Bay Clearinghouse Report For 2008

## San Francisco Bay Region Totals

			<u>2007</u>
Tanker arrivals to San Francisco Bay	148		785
Barge arrivals to San Francisco Bay			<i>(before 2008 barge arrivals were not totaled)</i>
Total Tanker and Barge Arrivals	148		
Tank ship movements & escorted barge movements	833		3,907
Tank ship movements	466	55.94%	2,241
Escorted tank ship movements	227	27.25%	1,121
Unescorted tank ship movements	239	28.69%	1,120
Tank barge movements	367	44.06%	1,666
Escorted tank barge movements	165	19.81%	869
Unescorted tank barge movements	202	24.25%	797

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

Escorts reported to OSPR 0 9

<b>Movements by Zone</b>	<b>Zone 1</b>	<b>%</b>	<b>Zone 2</b>	<b>%</b>	<b>Zone 4</b>	<b>%</b>	<b>Zone 6</b>	<b>%</b>	<b>Total</b>	<b>%</b>
Total movements	460		784		0		376		1,620	
Unescorted movements	231	50.22%	412	52.55%	0	0.00%	187	49.73%	830	51.23%
Tank ships	152	33.04%	237	30.23%	0	0.00%	92	24.47%	481	29.69%
Tank barges	79	17.17%	175	22.32%	0	0.00%	95	25.27%	349	21.54%
Escorted movements	229	49.78%	372	47.45%	0	0.00%	189	50.27%	790	48.77%
Tank ships	137	29.78%	223	28.44%	0	0.00%	93	24.73%	453	27.96%
Tank barges	92	20.00%	149	19.01%	0	0.00%	96	25.53%	337	20.80%

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.



## Best Maritime Practices “BMP” Guidelines

1. BMP **should “NOT” be considered as follows:**
  - a. A regulation, unless the Harbor Safety Committee (HSC) chooses to make this recommendation to the OSPR Administrator
  - b. An underground regulation—it cannot be enforced by any regulatory agency
  
2. BMP **should be considered as follows:**
  - a. A common sense measure or practice that would normally be employed by a prudent mariner
  - b. A useful tool that promotes safety and adds value and is not an exercise in generating paper
  - c. The result of “brainstorming at the grass roots level” by each HSC
  - d. An improved process or procedure that may originate as a recommendation from the HSC
  - e. “Best Maritime Practice” is an accepted and agreed upon method to conduct an operation or process that will enhance safety for vessels, personnel, dockside facilities and marine resources
  - f. A good example of a “Best Maritime Practice” would be the SF and LA/LB Harbor Safety Committees’ recommended procedure with respect to bunker barge transfer operations while alongside containers vessels at terminals
  - g. Include as a disclaimer that the “BMP” are not in conflict with nor do they replace existing regulations which are already in place
  
3. The BMP process
  - a. Once a “BMP” is developed it should be communicated to members of the respective harbor community in one of or all of the following manners
    - 1) Incorporated into related procedure manuals or references made to the particular “BMP”
    - 2) Posted on the OSPR web page with links to appropriate Marine Exchange HSC web pages for the public at large
    - 3) Distributed in the form of brochures
    - 4) Referenced in the “Coast Pilot” as appropriate
  - b. “BMP” should also be included in the Committee’s respective Harbor Safety Plan
  - c. “BMP” should be reviewed or revisited annually to determine if they can be improved upon, or even discontinued as the case may be

**Harbor Safety Committee  
Of the San Francisco Bay Region**

**Report of the  
U.S. Army Corps of Engineers, San Francisco District**

**March 13, 2008**

**1. CORPS 2007 O&M DREDGING PROGRAM**

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

- a. **Main Ship Channel** – A survey was completed within the last two weeks. The new survey has not been posted yet. Hopefully it will be by the end of this week.
- b. **Richmond Outer Harbor and Richmond Long Wharf** – Survey was conducted February 1 and 2, 2008 and have been posted. Dredging will be conducted this summer and fall. **No change.**
- c. **Richmond Inner Harbor** – Survey was conducted January 25 and 29, 2008 and have posted. Dredging will be conducted this summer and fall. **No change.**
- d. **Oakland O & M Dredging** – The turning basin and inner harbor were completed on December 7, 2007. Surveys have been posted. There is a high spot in the inner channel. This high spot appears to be a pile of rocks (from an unknown source), which will be removed in the next month or two as part of the deepening project. **The rock pile still has not yet been removed. If money becomes available, the removal of the rock will hopefully be contracted by the first of April.**
- e. **Suisun Bay Channel** – Suisun Bay Channel, Bullshead and New York Slough have been dredged. New surveys have been posted for Bullshead (see Hydrographic Survey Update). **No change**
- f. **Pinole Shoal** - Pinole Shoal will be dredged this year. A condition survey will be conducted this spring. **Presumably in April.**
- g. **Redwood City/San Bruno Shoal** – Because of endangered species issues, dredging is being delayed until June 2008, with completion in August 2008. **No change**

**2. DEBRIS REMOVAL** The debris removal total for February 2008 was 38 tons, collected by the Grizzly. The Raccoon is still in the shipyard for repairs.

	Grizzly	Raccoon		Total						
March	12.00	24.00		36						
April	49.00	17.00		66						
May	13.00	0.00		13						
June	5.25	0.00		5						
July	4.00	0.00		4						
August										
September	12.50	0.00		13						
October	16.50	0.00		17						
November	32.00			32						
December	4.50			5						
Jan. 2008	57.00	0.00		57						
Feb	38.00			38						
Totals	243.75	41.00	0.00	286						

### 3. UNDERWAY OR UPCOMING HARBOR IMPROVEMENTS

**Oakland 50-ft Deepening Project** - Deepening of Oakland's Outer Harbor began on March 16, 2007. Completion targeted for September 2008, for the entire Outer Harbor.  
**No change.**

### 4. EMERGENCY (URGENT & COMPELLING) DREDGING

There has been no emergency dredging in FY 2008.

### 5. OTHER WORK

a. **San Francisco Bay to Stockton** The Corps received \$403,000 for this project. The Corps will be finalizing a hydrodynamic model this year. This model will be used for ship simulations that will be done next year – assuming that funds are available. There will be two scoping meetings for the Environmental Impact Study/ Environmental Impact Report. The first will be on March 26 in Martinez at the County Facilities; the second will be on April 2 in Stockton at the Caesar Chavez Library. The Corps plans to determine the existing baseline conditions this year.

b. **Sacramento River Deep Water Ship Channel Deepening** Federal funding has been received (no money from the local sponsor as yet). The money will be used to develop a sampling and analysis plan, a Supplemental Environmental Impact Study and to continue with the salinity modeling work group (for Central Valley RWQCB). The proposed design depth is - 35 feet mean lower low water, plus overdepth.

## 6. HYDROGRAPHIC SURVEY UPDATE

Address of Corps' web site for completed hydrographic surveys. **New survey.**

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

Main Ship Channel – Survey was completed in July 2007 and has been posted.

Pinole Shoals – Surveys completed in July 2007 have been posted.

Suisun Bay Channel, **Bullshead Channel – Surveys dated February 13, 2008 have been posted.**

Suisun Bay Channel, NY Slough – Post-dredge surveys dated October 2007 have been posted.

Redwood City – Surveys completed in April 2007 have been posted.

San Bruno Shoal – completed November, 2006. Not yet posted.

Oakland Inner – Surveys completed in November and December 2007 have been posted.

Oakland Outer Harbor – Surveys dated January 23-24, 30, 2008 have been posted.

Oakland Outer Harbor Entrance– Surveys dated January 15-16, 2008 have been posted.

Southampton Shoal and Richmond Long Wharf – Surveys completed in February 1-2, 2008 have been posted.

Richmond Inner Harbor: Surveys conducted in January and February 2008 have been posted.

North Ship Channel: Surveys dated February and March 2007 have been posted.



US Army Corps  
of Engineers®

SAN FRANCISCO DISTRICT

# PUBLIC NOTICE

Planning Branch  
1455 Market Street  
San Francisco, CA 94103-1398

**Notice of Intent to Prepare a Joint Environmental Impact  
Statement/Environmental Impact Report for the San Francisco Bay to  
Stockton (John F. Baldwin and Stockton Ship Channels) Navigation  
Improvement Project, California**

PROJECT CONTACT: Nancy Ferris  
Phone: (415) 503-6865/E-mail: [SPNETPA@usace.army.mil](mailto:SPNETPA@usace.army.mil)

The U.S. Army Corps of Engineers will hold a public meeting to receive input from members of the public on the scope of the Joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the San Francisco Bay to Stockton (John F. Baldwin and Stockton Ship Channels) Navigation Improvement Project, California. The public scoping meetings will be held on:

**March 26, 2008  
5:00 p.m. to 7:00 p.m.**

at

Contra Costa County Administration Bldg.  
Room 101  
651 Pine Street  
Martinez, California

**April 2, 2008  
5:00 p.m. to 7:00 p.m.**

at

Cesar Chavez Central Library  
Stewart-Hazelton Room  
605 N. El Dorado Street  
Stockton, California

In accordance with the National Environmental Policy Act (NEPA), the U.S. Army Corps of Engineers (Corps), San Francisco District, the Port of Stockton, and the Contra Costa County Water Agency are preparing an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) to evaluate the efficiency of the movement of goods along the existing deep draft navigation route extending from the San Francisco Bay to the Port of Stockton. The proposed action consists of altering the depth of the deep draft navigation route. The authority for the San Francisco Bay to Stockton Navigation Improvement Project was provided under House Document 208, House Report 89-973 cited in Section 301 of the Rivers and Harbors Act of 1965, Pub. L. 89-298, § 204, 79 Stat. 1073.

The San Francisco Bay to Stockton Improvement Project includes the John F. Baldwin and Stockton Ship Channels, which extend 75 nautical miles from the Pacific Ocean, just outside the Golden Gate, to the Port of Stockton. The project is divided into two separate reaches, with the John F. Baldwin Ship Channel extending from the Golden Gate to Chipps Island, and the Stockton Ship Channel extending from Chipps Island to the Port of Stockton. Portions of the reaches have been deepened in the past; however, not all reaches attained authorized dimensions. Currently, the Corps is reevaluating the authorized Federal project to determine the extent to which changes to channel dimensions are warranted.

Based on the need for improved efficiency of the movement of goods, the proposed action is to alter the depth of the John F. Baldwin and Stockton Ship Channels. The following are some of the alternatives that will be evaluated in the EIS/EIR: modify the shipping channels to authorized depths, modify the shipping channels to alternate depths, and alternative transport methods.

The Corps is seeking participation and input of all interested federal, state, and local agencies, Native American groups, and other concerned private organizations or individuals through this public notice. The purpose of the public scoping meetings is to solicit comments regarding the potential impacts, environmental issues, and alternatives associated with the proposed action. Public participation will help to define the scope of the environmental analysis in the EIS/EIR; identify other significant issues; provide other relevant information; and recommend mitigation measures.

**Comments will be accepted through April 30, 2008.** All interested persons are encouraged to provide written comments on the scope of the EIS/EIR. Written comments and requests for additional information regarding the proposed action should be addressed to:

Department of the Army  
San Francisco District  
U.S. Army Corps of Engineers  
1455 Market Street, 15<sup>th</sup> Floor  
San Francisco, CA 94103-1398  
Fax: (415) 503-6692

**Contact:** Nancy Ferris  
**Phone:** (415) 503-6865  
**Email:** [SPNETPA@usace.army.mil](mailto:SPNETPA@usace.army.mil)

**DEPARTMENT OF THE ARMY**  
U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO  
CORPS OF ENGINEERS  
1455 MARKET STREET, 15<sup>TH</sup> FLOOR  
SAN FRANCISCO, CA 94103-1398  
CESPN-ET-P

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## Scoping Process

The Corps is seeking participation and input of all interested federal, state, and local agencies, Native American groups, and other concerned private organizations or individuals. The Corps is soliciting comments regarding the potential impacts, environmental issues, and alternatives associated with the proposed action. Public participation will help to define the scope of the environmental analysis in the EIS/EIR; identify other significant issues; provide other relevant information; and recommend mitigation measures.

The public comment period starts on March 12, 2008 and closes on April 30, 2008.

All comments received will be considered in the preparation of the EIS/EIR.

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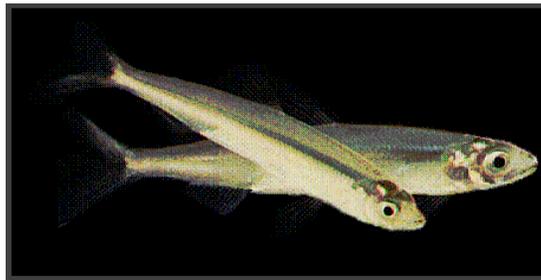
**Dredging the Sacramento Ship Channel**  
Photo by Michael Nevins

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## Partnership with the Corps

The U.S. Army Corps of Engineers participates in the development and management of the Nation's water and related land resources. The quality and success of our partnership is based on mutual respect, integrity, cooperation, flexibility, and sincerity. Whenever there are opportunities for you to cooperate, inform, advise, negotiate, appeal or otherwise participate in any facet of decision-making, we encourage and expect you to do so, and will welcome and fully accept your participation. Your ideas, views and other offerings will be given full and fair consideration and you will be given the opportunity to make a difference in the decision-making process.

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**Delta Smelt**  
Photo courtesy of NMFS

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## For Additional Information:

Questions and comments regarding the proposed action can be addressed to: Ms. Nancy Ferris, U.S. Army Corps of Engineers, San Francisco District, 1455 Market Street, San Francisco, CA 94103-1398, telephone: (415) 503-6865, or SPNETPA@usace.army.mil.

All written comments can also be faxed to (415) 503-6692 or sent electronically to SPNETPA@usace.army.mil.

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## San Francisco Bay to Stockton Improvement Project

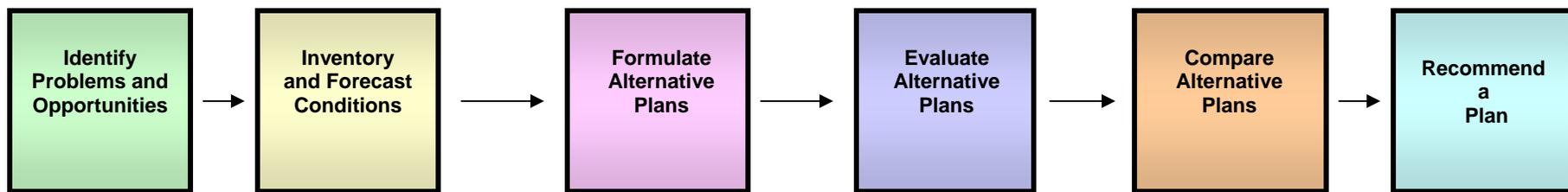
A partnership of the  
U.S. Army Corps of Engineers,  
Contra Costa County,  
and the  
Port of Stockton



**John F. Baldwin Ship Channel**  
Photo by Ralph Campbell

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# CORPS PLANNING PROCESS



**Step 1: Identify Problems and Opportunities**, as well as objectives and constraints, to guide the planning and evaluation process.

**Step 2: Inventory and Forecast Conditions** to determine existing conditions in the study area and make predictions about the future of that area if a project is not implemented.

**Step 3: Formulate Alternative Plans** by synthesizing input from a diverse pool of people (inside and outside the Corps) to develop an array of potential plans.

**Step 4: Evaluate Alternative Plans** by determining how each potential plan would influence future conditions in the study area, if implemented.

**Step 5: Compare Alternative Plans** by identifying the most important selection criteria and comparing the array of plans across those criteria.

**Step 6: Recommend a Plan** for implementation, taking into account Federal and local criteria, interests, and goals.

## Project Description

The San Francisco Bay to Stockton Improvement Project is a Congressionally authorized study being performed by the U.S. Army Corps of Engineers (Corps) together with local sponsors to identify and recommend for Federal funding one or more projects for navigation improvements.

In accordance with the National Environmental Policy Act (NEPA), the U.S. Army Corps of Engineers (Corps), San Francisco District, the Port of Stockton, and the Contra Costa County Water Agency are preparing an Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) to evaluate the efficiency of the movement of goods along the existing deep draft navigation route extending from the San Francisco Bay to the Port of Stockton. The proposed action consists of altering the depth of the deep draft navigation route. The authority for the San Francisco Bay to Stockton Navigation Improvement Project was provided under House Document 208, House Report 89-973 cited in Section 301 of the Rivers and Harbors Act of 1965, Pub. L. 89-298, § 204, 79 Stat. 1073. The study team will prepare an EIS/EIR to consider all reasonable alternatives, evaluate

potential impacts of the proposed action, and identify appropriate mitigation measures.

The study area includes the John F. Baldwin and Stockton Ship Channels, which extend 75 nautical miles from the Pacific Ocean, just outside the Golden Gate, to the Port of Stockton. The project is divided into two separate reaches, with the John F. Baldwin Ship Channel extending from the Golden Gate to Chipps Island, and the Stockton Ship Channel extending from Chipps Island to the Port of Stockton. Portions of the reaches have been deepened in the past; however, not all reaches attained authorized dimensions. Currently, the Corps is reevaluating the authorized Federal project to determine the extent to which changes to channel dimensions are warranted.

**Project Alternatives.** The following are some of the alternatives that will be evaluated in the EIS/EIR:

- a. No action. The efficiency of maintaining the current depths of the John F. Baldwin and Stockton Ship Channels will be evaluated.
- b. Modify the shipping channels to authorized depths. Following the original plans of the authorized project,

the channels will be modified to the authorized project depths. Alternative placement sites for dredged material, including beneficial reuse, will be evaluated.

c. Modify the shipping channels to alternate depths. All or portions of the John F. Baldwin and Stockton Ship Channels will be evaluated for depths differing from current or authorized depths. This will be accomplished in consideration of economic and environmental impacts of the proposed project.

d. Alternative transport methods. Alternative methods for the transport of goods such as truck or rail transport will be evaluated.

4. Environmental Considerations. In all cases, pursuant to NEPA guidelines, environmental considerations will include human health, biological resources, geophysical impacts, air quality, water quality, salinity, hazards, noise, utilities and service systems, transportation, land use and planning, historic and cultural resources, aesthetics, recreation, social and economic effects, as well as other potential environmental issues of concern.



**Delta Tule Pea**  
Photo courtesy of  
CADWR



## CALIFORNIA STATE LANDS COMMISSION

### HARBOR SAFETY COMMITTEE MONTHLY REPORT - FEBRUARY COMPARISON

#### **VESSEL TRANSFERS**

	Total Transfers	Total Vessel Monitors	Total Transfer Percentage
February 1 - 28, 2008	289	123	42.56
February 1 - 29, 2008	247	134	54.25

#### **CRUDE OIL / PRODUCT TOTALS**

	Crude Oil ( D )	Crude Oil ( L )	Overall Product ( D )	Overall Product ( L )	GRAND TOTAL
February 1 - 28, 2008	7,632,000	0	20,567,500	8,263,947	28,831,447
February 1 - 29, 2008	12,897,000	0	19,603,199	14,435,508	34,038,707

#### **OIL SPILL TOTAL**

	Terminal	Vessel	Facility	Total	Gallons Spilled
February 1 - 28, 2008	0	0	0	0	0
February 1 - 29, 2008	1	0	0	1	1 Gallon - Fuel Oil

\*\*\* 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.

## **Investigations into Causes of and Response to Cosco Busan Oil Spill**

*March 13, 2008 Update*

*Linda Scourtis, BCDC*

The work group is aware of the following investigations related to the Cosco Busan incident. Please contact the work group with additional information you may have related to these or other inquiries.

### **State Government Inquiries**

#### State Board of Pilot Commissioners

1. Through the Incident Review Committee (IRC), the Board investigates actions on the part of the pilot that may have contributed to the incident. The board will work with the HSC work group as it also considers lessons learned from the incident.

*Update:* Hearing to be presided over by an administrative law judge has been rescheduled to begin September 2, 2008. The pilot's license will remain suspended until outcome is determined.

*Executive Director: Capt. Pat Moloney, 415.397-2253*

2. Established a standing Navigation Technology Committee. The purpose is "to investigate the different types of navigation systems generally found on ships calling on the San Francisco Bay Area and the sufficiency of pilot training in the use of such systems; to evaluate lap top computers, GPS units and other portable electronic chart systems that can be brought aboard ships by pilots to assist in navigation...The committee shall establish a dialogue with the Harbor Safety Committee and its cognizant subcommittees in the exchange of relevant information."

*Capt. Bruce Horton will serve as liaison to the BOP for interim reports.*

*Timeline: Preliminary report June 1*

#### Governor's State Investigation into causes of and response to the oil spill

The Governor has directed OSPR, in coordination with the Governor's Office of Emergency Services and the Department of Fish and Game, to review procedures and identify areas for improvement including prevention, preparation, response, notification, and cleanup; assess natural resource damage and the associated economic impact to fishermen, small businesses and state and local economies; assess environmental damage to water and beaches; identify the best ways to return the environment to its natural state.

*Report due April 2008*

*Update:* SF Harbor Safety Committee forwarded findings of PORTS work group to OSPR Feb 1, 2008. Tug Escorts Work Group recommendations to be discussed at March 13 HSC meeting. Navigation/Ferry Operations, Prevention through People and Tug Escorts work groups have each met twice (Prevention through People, four meetings) to discuss how to improve navigational safety in light of the Cosco Busan incident.

## Harbor Safety Committee Special Cosco Busan Work Group

### California State Legislature

State Assembly special hearing on spill response held in Emeryville November 15, 2007. State Senate Joint Informational Hearing of Natural Resources and Governmental Organization subcommittees held a special hearing November 30, 2007, on the state response to the spill.

The following bills related to navigational issues have been introduced in the State Legislature in response to the Cosco Busan spill:

**SB 1217, Yee**, would become effective February 15, 2010 and would add Section 1157.5 to the Harbors and Navigation Code, requiring the Board of Pilot Commissioners to annually submit a report to the Legislature re the number of vessel movements; status of each licensed pilot and trainee; incidents and resulting investigations, and their dispositions; and a summary of the board's finances.

**SB 1627, Wiggins**, would place the Board of Pilot Commissioners under the Department of Consumer Affairs, create a Special Fund to administer the provisions of the bill, create the Pilot Trainee Fund and the Pilot and inland Pilot Continuing Fund, and would require the Board to report annually to the Legislature certain statistical information relating to incidents and reports against licensees and to submit various specific financial reports to the Department of Finance and appropriate legislative budget committees.

**AB 2032, Hancock**, would amend Section 8670.3 of the Government Code (OSPRA) to revise the definition of "tank ship" to include self-propelled vessels that carry oil in a single tank with a capacity greater than 50,000 gallons; and amend Sections 46012 and 46028 of the Revenue and Taxation Code to increase the amount designated to be maintained in the Oil Spill Response Trust Fund from \$109,750,000 to \$200,000,000, of which \$100,000,000 shall be retained as cash and an equal amount accessible in the form of financial security to be adjusted annually for inflation.

**AB 2441, Lieber**, would amend Section 8670.17.2 of the Government Code (OSPRA) to require the OSPR Administrator to adopt regulations governing tug escorts for vessels carrying hazardous materials in state waters.

**ABs 1960, Nava, and 2631, Fuller**, are spot bills intended to amend the Lempert-Keene-Seastrand Act that may or may not be relevant to the work of the HSC; text not available at this time.

### **Federal Government Inquires**

#### National Transportation Safety Board (NTSB)

Will consider equipment and navigation systems as well as human error in looking into the cause of the accident: the performance of the master, pilot and crew, as well as the operation and maintenance of equipment and navigation systems. A second focus of the NTSB investigation will focus on the response to the spill.

*Public hearing scheduled in Washington, DC April 8-9. Report expected Fall 2008.*

#### U.S. Coast Guard: Incident Specific Preparedness Review (ISPR)

Will evaluate the effectiveness of the Coast Guard's oil spill response and communications efforts, as well as the overall preparedness system. The following are the investigating agencies: San Francisco, OSPR, Pacific States-British Columbia Oil Spill Task Force, Baykeeper, PMSA, NOAA and the USCG.

## Harbor Safety Committee Special Cosco Busan Work Group

*Update:* An initial report was released January 28, 2008, which concentrated on the first two weeks of response to the spill ([www.dfg.ca.gov/ospr/spill/incidents/cosco\\_busan/cosco-busan-ISPR-final-90115.pdf](http://www.dfg.ca.gov/ospr/spill/incidents/cosco_busan/cosco-busan-ISPR-final-90115.pdf)). The final report will expand on some focus issues in Phase I and add some that extend beyond the first two weeks of the incident. *Chair: Rear Admiral Carlton Moore, Ret.*

*Report on initial two weeks' response released January 28, 2008; final report due May 2008*

### Congressional Inquiry

Special Senate briefing with the USCG spill response was held in Washington, D.C., November 14, 2007. Special hearing on the Coast Guard spill response held by the House Subcommittee on Coast Guard and Maritime Transportation in San Francisco November 19, 2007. The congressional panel focused on a number of issues, including what caused the ship to hit the bridge, whether there were adequate communications and equipment on board, and why there were delays in reporting the spill and its severity.

Further inquiry into preparation for and response to the spill will be conducted by Department of Homeland Security inspector general.

*Briefing by Feb. 1, 2008, written report due April 9, 2008.*

Federal legislation to upgrade VTS technology, require pilots to carry their own navigational laptop computers while piloting a vessel, and to raise liability limits for cargo ship owners to cover cleanup costs and damages proposed in the Senate late 2007.

**S. 2430, Boxer, Maritime Emergency Prevention Act of 2007**, would authorize the VTS to command the pilot of a vessel to modify the speed or direction of a vessel in an emergency or hazardous conditions as determined by the VTS director. Also would require a federally licensed pilot to carry and use a laptop computer equipped with a navigation system where determined by the pilotage authority that a computer is practical and necessary.

**S. 2699, Lautenberg/Boxer**, (“Oil Spill Prevention Act of 2008”) would require new vessels (contracted for construction after the date of enactment of the Act or delivered after August 1, 2010), with an aggregate capacity of 600 cubic meters or more of fuel oil to have double hulls, oil fuel being defined as “oil used as fuel in connection with the propulsion and auxiliary machinery of the vessel in which such oil is carried.”

**H.R. 5428, Tauscher**, would direct the Coast Guard to issue regulations requiring pilots of certain vessels to carry and utilize a portable electronic device that is equipped for navigational purposes and capable of connection to AIS.

### **Other Organizations**

#### San Francisco Bar Pilots

The San Francisco Bar Pilots internal review of its policies and procedures as well as of the Harbor Safety Committee Safety Plan will produce recommendations in the near future to improve shipping safety. The pilots will work with the HSC work group to inform our efforts.

*Update:* The Pilots with the USCG have identified ‘Critical Areas’ within the Bay to which specific protocols should apply in the event of limited. A Draft Critical Areas memo was provided the HSC Navigation Work Group for review and recommendation for a vote by the HSC in March.

*Capt Pete McIssac: 415.362-5436*

March 18, 2008

TO: Lisa Curtis, Administrator, Office of Spill Prevention and Response  
FROM: Joan Lundstrom, Chair, Harbor Safety Committee of the San Francisco Bay Region  
SUBJECT: Governor's Directive to Analyze the Cosco Busan Oil Spill Incident

## **Introduction**

In response to the Cosco Busan oil spill incident, Governor Schwarzenegger directed a state investigation into the causes of and response to the oil spill. The directive outlined a number of issues to ensure "any action necessary to prevent this from ever happening again." OSPR tasked the Harbor Safety Committee (HSC) of the San Francisco Bay Region to "analyze the navigational safety-related issues of the Governor's directives and make appropriate recommendations regarding the prevention aspects of the incident."

The HSC Work Groups addressed the issues raised in the Governor's directives based on information available at this time, noting that the National Transportation Safety Board (NTSB) report on the cause was not expected to be completed until August 8, and the State Board of Pilot Commissioners Accusation (Case No. 07-01) of the pilot is scheduled for hearing before an Administrative Law Judge on September 2, 2008. Other investigations are focused on oil spill response efforts.

Note: The following findings and recommendations should be considered preliminary, as not all evidence was accessible. As new information becomes available, the Harbor Safety Committee may revisit or address other policy implications.

The Tug Escort Work Group met on February 8 and February 29, 2008, to discuss the Cosco Busan incident and its implications for navigational safety related issues and to make recommendations following the Governor's directive. In responding to the Governor's directive, the Work Group looked specifically at the following questions:

### **1. Do the Known Facts of the Cosco Busan Incident Suggest that Tug Escorting would be an Effective Strategy to prevent a Similar Occurrence?**

Findings: The purpose of tug escorting is to affect the speed or direction of a vessel when an emergency arises such as a steering or propulsion failure of the vessel. California Code of Regulations, Subdivision 4, Chapter 4, Section 851.4 c. which outlines tug escort regulations for San Francisco, San Pablo and Suisun Bays, states an emergency shall include, but not be limited to, any of the following:

- "imminent and immediate danger to the vessel, its cargo, or its crew; or imminent and immediate danger to a marine terminal, or to the escort tug; or
- imminent and immediate danger to a vessel in close proximity to the tank vessel; or
- any emergency declared by the Captain of the Port."

The Cosco Busan appeared to have full use of its steering and propulsion systems prior to and following the allision with the bridge. Also it appeared that the vessel's master or pilot did not attempt to position the tug that was tethered to the stern to alter the vessel's course.

While an escort tug may have been able to provide some assistance to maneuver the Cosco Busan, it is questionable as to how effective such assistance would be considering:

- The speed of the Cosco Busan just prior to the allision, as reported in the Board of Pilot Commissioners Accusation of the pilot, was 11 knots with a one-knot flood current. This speed is at the high end of the performance range for most escort tugs to have safely provided maneuvering assistance.
- Since the pilot had not instructed the tug in advance to be used in an escort mode, the pilot's directions to the tug probably could not have been conveyed in the brief amount of time in extremis before the vessel hit the bridge.
- The tug's ability to act as a "lookout" or "leader" when operating in an escort mode along side or behind the vessel is limited. When the vessel being escorted is much higher than the tug, the tug's visual and radar view are often obstructed.

**Conclusion:** The Work Group concluded that there was no current evidence that would suggest tug escorting would have prevented the Cosco Busan incident or similar incidents from occurring.

## **2. Could an Escort Tug be used to reduce the Risk of a Similar Incident occurring in the Future?**

**Findings:** The Work Group discussed alternate uses for escort tugs such as being used as a "leader" to run ahead of a vessel in limited visibility, acting as a navigational aid. Specific concerns of having a tug running ahead of a vessel include:

- A tug in front of a vessel adds another element of potential risk or distraction for the vessel being escorted. The tug is at risk of being overtaken, collided with and/or capsized by the vessel, as the speed of the tug is generally slower than that of the vessel.
- The tug would not typically have better visibility than the vessel being escorted.
- The tug's personnel are focused on safely keeping the tug's position relative to the vessel thus having limited capacity for the additional responsibility of "leading" the vessel being escorted.

**Conclusion:** The Work Group concluded that the risk associated with using an escort tug as a "leader" in limited visibility outweighs potential benefits.

**Tug Escort Work Group Recommendation:** The Harbor Safety Committee unanimously adopted the Tug Escort Work Group's findings and recommendations at its March 13, 2008 regular meeting. (Note: As a committee established by the State of California, all Harbor Safety Committee meetings are open to the public and publicly noticed and agendized under the provisions of the Ralph M. Brown Open Meeting Act.)

The following markup was submitted by Captain Marc Bayer

TUG ESCORT WORK GROUP (Draft 3/11/08)

From: Fred Henning, Work Group Chair  
Subject: Work Group Recommendations/Findings on Tug Escorting  
Date: March 13, 2008

---

**Introduction**

In response to the Cosco Busan oil spill incident, Governor Schwarzenegger directed a state investigation into the causes of and response to the oil spill. The directive outlined a number of issues to ensure “any action necessary to prevent this from ever happening again.” OSPR tasked the Harbor Safety Committee (HSC) of the San Francisco Bay Region to “analyze the navigational safety-related issues of the Governor’s directives and make appropriate recommendations regarding the prevention aspects of the incident.”

The HSC Work Groups addressed the issues raised in the Governor’s directives based on information available at this time, noting that the National Transportation Safety Board (NTSB) report on the cause was not expected to be completed until August 8, and the State Board of Pilot Commissioners Accusation (Case No. 07-01) of the pilot is scheduled for hearing before an Administrative Law Judge on September 2, 2008. Other investigations are focused on oil spill response efforts. ~~In this context recommendations should be considered preliminary, as not all evidence was accessible. The Harbor Safety Committee may revisit or address other policy implications as a result of additional investigative findings.~~

The Tug Escort Work Group met on February 8 and February 29, 2008 to discuss the Cosco Busan incident and its implications for navigational safety related issues and to make recommendations following the Governor’s directive. In responding to the Governor’s directive, the Work Group looked specifically at ~~the~~ following three questions.

**THE FOLLOWING FINDINGS AND CONCLUSIONS SHOULD BE CONSIDERED PRELIMINARY BECAUSE THERE ARE ONGOING INVESTIGATIONS THAT HAVE NOT YET CONCLUDED AND MAY PROVIDE NEW INFORMATION FOR CONSIDERATION.**

1. **Do the ~~Known~~ Facts Made Available to the Tug Escort Work Group of for the Cosco Busan Incident Suggest that Tug Escorting Would be an Effective Strategy to Prevent a Similar Occurrence?**

Findings: The purpose of tug escorting is to affect the speed or direction of a vessel when an emergency arises such as a steering or propulsion failure of the vessel. California Code of Regulations, Subdivision 4. Chapter 4. Section 851.4 c. which outlines tug escort regulations for San Francisco, San Pablo and Suisun Bays, states an emergency shall include, but not be limited to, any of the following:

- “imminent and immediate danger to the vessel, its cargo, or its crew; or
- imminent and immediate danger to a marine terminal, or to the escort tug; or
- imminent and immediate danger to a vessel in close proximity to ~~the~~ **thank a tank** vessel; or
- any emergency declared by the Captain of the Port.”

The Cosco Busan appeared to have had full use of its steering and propulsion systems prior to and following the allision with the bridge. ~~Also it appeared~~ There is no indication that the vessel’s master or pilot ~~did not~~ attempted to utilize or reposition the tug that was tethered to the stern of the Cosco Busan to alter the vessel’s course or assist in maneuvering in any way.

While an escort tug may have been able to provide some assistance to maneuver the Cosco Busan, it is questionable as to how effective such assistance would be considering:

- The speed of the Cosco Busan, as reported in the Board of Pilot Commissioners Accusation of the pilot, was 11 knots with a one-knot flood current. This speed is at the high end of the performance range for ~~many most~~ most escort tugs to have safely ~~operated~~ provided maneuvering assistance.
- Since the pilot had not ~~planned ahead of time~~ instructed for the tug in advance to be used in an escort mode, the pilot’s directions to the tug probably could not have been conveyed in the brief amount of time of extremis before the vessel hit the bridge.
- The tug’s ability to act as a “lookout” or “leader” when operating in an escort mode along side or behind the vessel is limited. ~~by the vessel.~~ When the vessel being escorted is much higher than the tug, which is much higher than the tug, thus obscuring the tug’s visual and radar view are often obstructed.

Conclusion: The Work Group concluded that ~~there was no current evidence that~~ would suggest tug escorting would have prevented the Cosco Busan incident or similar incidents from occurring.

## **2. Could an Escort Tug be used to Reduce the Risk of a Similar Incident Occurring in the Future?**

Findings: The Work Group discussed alternate uses for escort tugs such as being used as a “leader” to run ahead of a vessel in limited visibility, acting as a

navigational aid. Specific concerns of having a tug running ahead of a vessel include:

- A tug in front of a vessel adds another element of potential risk or distraction for the vessel being escorted. ~~is in danger~~ The tug also is at risk of being overtaken allided with and or and capsized by the vessel, as the speed of the tug is generally slower than that of the vessel.
- The tug ~~usually does not have~~ would not typically have better visibility than the vessel being escorted. ~~for example a 100 foot-~~
- ~~long tug tethered to the side of a 900 foot long vessel.~~
- The tug's personnel are focused on safely keeping the tug's position relative to the vessel thus having limited capacity for the additional responsibility of "leading" the vessel being escorted.
- ~~It is more likely to be a distraction to the captain or pilot of the vessel than to be an additional resource.~~

**Conclusion:** The Work Group concluded that the risk associated with using an escort tug as a "leader" ~~to a vessel~~ in limited visibility outweighs potential benefits.

### **3. Should Tug Escort Regulations be Expanded to Include Vessels Carrying Hazardous Materials?**

**Findings:** The Harbor Safety Committee ~~extensively studied~~ considered the issue of whether tug escorts should be mandated for chemical carrying vessels. In 2004 and again in 2006, the Committee recommended that the Coast Guard Captain of the Port has the authority to require escorting of the existing vessels carrying hazardous materials. The Committee acknowledged the enormous difficulties in defining "hazardous cargo", "sufficient quantity" and "reporting of hazardous cargo".

**Conclusion:** The Tug Escort Work Group reaffirmed the Committee's previous position that the Captain of the Port has sufficient authority to mandate tug escorts for particular ships and that further regulation is not recommended.

Note: As part of "lessons learned" from this incident, the Harbor Safety Committee continues to look for improving all aspects of safety in the harbor. The Tug Escort Work Group will conduct further meetings to recommend "Best Practices" for tug escorting in San Francisco Bay as protocols to be included in the Harbor Safety Plan.

March 19, 2008

TO: Lisa Curtis, Administrator, Office of Spill Prevention and Response

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

SUBJECT: Governor's Directive to Analyze the Cosco Busan Oil Spill Incident

## **Introduction**

In response to the Cosco Busan oil spill incident, Governor Schwarzenegger directed a state investigation into the causes of and response to the oil spill. The directive outlined a number of issues to ensure "any action necessary to prevent this from ever happening again." OSPR tasked the Harbor Safety Committee (HSC) of the San Francisco Bay Region to "analyze the navigational safety-related issues of the Governor's directive and make appropriate recommendations regarding the prevention aspects of the incident."

The HSC Work Groups addressed the issues raised in the Governor's directives based on information available, noting that the National Transportation Safety Board (NTSB) report on the cause is not expected to be completed until autumn 2008, and the State Board of Pilot Commissioners Accusation (Case No. 07-01) of the pilot is scheduled for hearing before an Administrative Law Judge beginning September 2, 2008. Other investigations are focused on oil spill response efforts.

The Navigation Work Group met January 23 and March 4, 2008, to address issues related to navigating San Francisco Bay in inclement weather, specifically, those affecting large vessels transiting during reduced visibility. To advance this effort, the San Francisco Bar Pilots and the Coast Guard developed Guidelines for Navigating in Reduced Visibility ("Guidelines"), which were reviewed by the Navigation Work Group, and which are part of this recommendation.

Note: The following findings and recommendations should be considered preliminary, as not all evidence was accessible. As new information becomes available, the Harbor Safety Committee may revisit or address other policy implications.

## **Report From the Navigation Work Group on Navigating San Francisco Bay in Reduced Visibility**

Navigating the San Francisco Bay Region during periods of reduced visibility requires mariners to exercise additional caution and vigilance. The Bay region, consisting of several bays and rivers, is one of the foggiest harbors in the United States. In-Bay distances are long. There is not a single regional climate, but a series of microclimates with variable fog. During summer, 30 to 40 percent of parts of the Bay may experience foggy conditions. In winter, the fog may be denser, originating from a different direction than summer fog.

## **Role of Reduced Visibility in Cosco Busan Incident**

Reduced visibility was a causal factor in the Cosco Busan incident: the State Board of Pilot Commissioners found in its Accusation (Case No. 07-01) that, “At the time of departure [from the dock], [the pilot] had reason to doubt whether the ship could proceed safely and...had insufficient information about the level of visibility along [the] intended route. Under the circumstances, the Cosco Busan’s departure from Berth 56 was “contrary to the guidelines in the San Francisco, San Pablo and Suisun Bays Harbor Safety Plan (“HSP”), which provide for various factors to be considered before moving a vessel...” and further provide that “vessels within the Bay at a dock...should not commence movement if visibility is less than .5 nautical miles throughout the intended route, unless the operator’s assessment of all variables is that the vessel can proceed safely.”

In reviewing the Harbor Safety Plan guidelines quoted above, the Navigation Work Group determined there was a need to clarify and expand on the guidelines because, as was noted, the Bay region is a series of microclimates with variable fog conditions.

## **Recommended Guidelines for Navigating in Reduced Visibility**

These guidelines should be used by the mariner when planning, initiating or navigating a transit in the Bay during periods of reduced visibility. These guidelines acknowledge that **Large Vessels** are not as maneuverable as smaller vessels and therefore define **Large Vessels** as power driven vessels of 1600 gross tons or more, and tugs with barges of 1600 gross tons or more. Mariners are at all times to comply with the requirement of the International Regulations for Avoiding Collisions at Sea, or COLREGS.

**Critical Maneuvering Areas (CMAs):** There are areas within the Bay where additional standards of care are required due to the restrictive nature of the channel, proximity of hazards, or the prevalence of adverse currents. Large vessels should not transit through CMAs when visibility is less than 0.5 nautical miles.

Locations within the Bay identified as Critical Maneuvering Areas:

Redwood Creek  
San Mateo-Hayward Bridge  
Oakland Bar Channel\*  
Islais Creek Channel  
Richmond Inner Harbor  
Richmond-San Rafael Bridge, East Span  
Union Pacific Bridge  
New York Slough, up-bound  
Rio Vista Lift Bridge

\*Note: the Oakland Bar Channel is identified due to cross currents and its proximity to the Bay Bridge and Yerba Buena Island.

**Vessels docked:** Large vessels at a dock within the Bay should not commence a movement if visibility is less than 0.5 nautical miles at the dock.

**Vessels proceeding to dock:** Large vessels proceeding to a dock should anchor if visibility at the dock is known to be less than 0.5 nautical miles, unless, under all circumstances, proceeding to the dock is the safest option.

Note: Vessel pilots or operators should notify VTS upon determination that a scheduled movement will be delayed or cancelled. If underway, they shall make a sailing plan deviation report per VTS regulations.

**Navigation Work Group Recommendations to the Harbor Safety Committee:**

1. The Work Group recommends that the “Guidelines for Navigating in Reduced Visibility” developed by the San Francisco Bar Pilots and the Coast Guard be adopted as “Best Maritime Practices for Large Vessels” and that the guidelines be incorporated into the San Francisco Bar Pilots’ Operations Guidelines as well as their Tide Book, the Coast Guard Vessel Traffic Service (VTS) Training Manual, U.S. Coast Pilot 7, and the San Francisco Harbor Safety Plan.

The Navigation Work group concluded the proposed guidelines would increase safe navigation in San Francisco Bay, and thereby respond in part to the Governor’s directive to analyze navigational safety-related issues of the Cosco Busan incident and make appropriate recommendations regarding the prevention of future incidents.

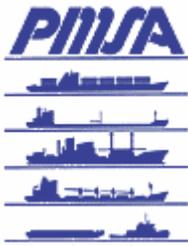
2. The Work Group recommends the Harbor Safety Committee consider drafting guidelines for navigating in reduced visibility for certain vessels less than 1600 gross tons.

3. The Work Group recommends the Harbor Safety Committee review the “Guidelines for Navigating in Reduced Visibility” within one year of adoption.

4. The Work Group recommends that the Harbor Safety Committee address issues surrounding the capacity and management of Coast Guard designated anchorages in San Francisco Bay.

5. The Work Group recommends that the Harbor Safety Committee assess the use of and advances in navigational aid technology to improve safe transit on San Francisco Bay. The Board of Pilot Commissioners has formed a Navigation Technology Committee to investigate the different types of navigation systems generally found on ships calling the Bay Area. A preliminary report is expected June 1, 2008. The HSC Navigation Work Group will review the report in considering recommendations to the full HSC.

**Harbor Safety Committee Action:** The Harbor Safety Committee unanimously adopted the Navigation Work Group findings and recommendations at its March 13, 2008 regular meeting. (Note: as a committee established by the State of California, all Harbor Safety Committee meetings are open to the public and publicly noticed and agendized under the provisions of the Ralph M. Brown Open Meeting Act).



March 11, 2008

Ms. Joan Lundstrom  
Chair  
Harbor Safety Committee of the San Francisco Region  
C/O Marine Exchange of San Francisco  
Fort Mason Center, Building B, Suite 325  
San Francisco, CA 94123-1380

Re: Navigation Work Group – Draft Restricted Visibility Guidelines

Dear Ms. Lundstrom:

The Pacific Merchant Shipping Association (PMSA) has been actively engaged in the various Harbor Safety Committee efforts as directed by Governor Schwarzenegger to review the Cosco Busan incident and make recommendations for improved safety and reduced risk for navigation on the Bay. We appreciate the work that San Francisco Bar Pilots and the USCG have performed in developing draft guidelines for navigation on the Bay and its tributaries in periods of reduced visibility. PMSA received the draft document February 26 and circulated the document to several member companies on February 27 for comments.

Unfortunately we were unable to collect those comments and provide them to the Navigation Work Group by their meeting date on March 4. I understand that the Navigation Work Group gave tentative approval to the guidelines at their March 4 meeting and recommended it for action to the full Harbor Safety Committee.

Comments to PMSA came from members representing both dry cargo and tanker companies and in most cases are from individuals who have direct navigational experience with commercial vessels. Many of the comments were similar in nature. I have summarized the scope of the comments below and would ask that the issues and concerns raised be considered by the Committee prior to taking final action on the proposal.

1. Time period for comment – a number of persons commented that the time allowed for comment was too short for such a complex issue with such great potential impact. PMSA expects to receive additional comments as some ship operators have reached out to fleet captains for their comments. We will pass along those comments to the Committee as they are received.
2. Limitation to Vessels Greater than 1600 GRT – Several persons questioned why the guidelines should only apply to larger vessels. Smaller vessels are subject to similar risks as large vessels in reduced visibility, regardless of maneuverability characteristics. Extending the guidelines to smaller vessels could reduce potential collisions with anchored vessels during limited visibility, such as the recent occurrence in Korea where a tug and barge collided with an anchored vessel, leading to oil in the water.
3. Emergency Anchorage Options – Comments touched on what options are available for emergency lay berth or anchorage if a vessel experiences a reduction in visibility during transit; no existing provision seems to accommodate such an occurrence. Pilots should be aware of and acknowledge all options prior to proceeding during times of limited visibility.
4. Half Mile Visibility Metric – Although we recognize that the Harbor Safety Plan has historically referenced a half mile visibility distance as a guideline, some respondents have suggested that advances in navigational aid technology should be considered, allowing movement under certain conditions with visibility less than half a mile.

5. Identified Critical Maneuvering Areas – Other areas in the Bay were also raised as being potential candidates for Critical Movement Areas (CMA), such as Pinole Shoal Channel. Perhaps the best way to deal with additions or deletions on CMA would be to acknowledge within the document that the identified areas are subject to future revision based on physical, hydrological, meteorological and technical changes; allowing continued debate in the future.

These issues and concerns have perhaps already been raised and debated amongst the Bar Pilots, the USCG and the Navigation Work Group. None the less we would like to take the opportunity to raise them formally with the Committee and ask that they be considered and, if deemed appropriate by the Committee, be subject to additional debate. We do not object to the draft guidelines moving forward as is for deliberation by the Committee if that is their consensus, however we would ask that the guidelines be reviewed by the Committee in one year for an assessment.

Sincerely,

A handwritten signature in cursive script that reads "John Berge".

John Berge  
Vice President

"For the record I would like to state that;

Geographic areas where anchoring is not an option should be considered.

Keeping a dock/berth occupied when visibility may have other repercussions i.e., vessels may be forced to remain at the berth or held out waiting for tide for extended periods of time in excess of a tidal cycle.

The master with the pilot must continue to have the final say.

Ensure that the Master and Pilot are not penalized for continuing on a passage when the threshold limits are met."

Captain Marc Bayer  
Manager West Coast Shipping Operations  
Tesoro Refining and Marketing Company  
150 Solano Way  
Martinez, CA 94553

I have reviewed this document and make the following comments

1. It's premature and makes its conclusions in isolation of other ongoing investigations which could significantly affect the outcome.
2. The document is more of a travelogue than a technical document and is largely non specific on technical matters in which the harbor safety committee have access to much information.
3. The document does not provide clear and unambiguous guidance on what should be done , nor does it conclude how the visibility should be determined for various points along the route given that the report quotes the uncertainties of knowing that.
4. No written effort was made in assessing the change which occurs in viewing a harbor by radar and the lack of navigationally distinctive features to ensure ready differentiation of safe passage through bridges.
5. No written assessment was made of available technology which may help in reduced visibility.
6. No comment was made on competencies to handle ships in reduced visibilities.
7. An unrealistic cut off of 1600 tons was used. Tug and barge traffic is frequently handled by tug masters whose license is for 300 tons only and yet the unit they handle can be highly sensitive and as much as 40,000 tons. The authors recommend a later study be made.

Reading this as a mariner, and a personal view this document comes up significantly short.

Best Regards

Bob

Captain Robert F. Weeks  
Team Leader, Safety & Environment  
Safety, Environment & External Affairs

March 20, 2008

TO: Lisa Curtis, Administrator, Office of Spill Prevention and Response  
FROM: Joan Lundstrom, Chair, Harbor Safety Committee of the San Francisco Bay Region  
SUBJECT: Governor's Directive to Analyze the Cosco Busan Oil Spill Incident

## **Introduction**

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Note: The following findings and recommendations should be considered preliminary, as not all evidence was accessible. As new information becomes available, the Harbor Safety Committee may revisit or address other policy implications.

The Prevention Through People Work Group (PTP) met January 8, February 7, February 28 and March 6, 2008, to address the issue of vessel communications, specifically "Should the Coast Guard Vessel Traffic Service (VTS) have expanded authority to direct vessel movements during inclement weather such as dense fog in San Francisco Bay?" Technical experts from the VTS participated in the Work Group's efforts.

## **Report From the Prevention Through People Work Group on the Question, "Should Coast Guard Vessel Traffic Service Authorities Be Expanded?"**

### **Vessel Traffic Service (VTS) History and Background**

The purpose of a VTS is to serve as an extension of a vessel's navigational bridge team, providing active monitoring and navigational information and advice for vessels in confined and busy waterways. The VTS monitors vessel movements, informs mariners of the movements of other vessels and potential hazards, recommends action when it sees a situation of which the mariner may not be aware, and directs the outcome of situations when necessary to prevent disasters.

Participation in the VTS System is mandated by law (33 Code of Federal Regulations (CFR) 161.16) for larger commercial vessels and passenger ferries. Transiting vessels make position reports to a vessel traffic center by radiotelephone and are in turn provided with accurate, complete, and timely navigational safety information. VTS San Francisco uses several land-based sensors including radar, the Automated Identification System (AIS), and closed circuit television sites, which send their signals to a central location where operators monitor and manage vessel traffic movement.

VTS San Francisco was the first Vessel Traffic Service System established by the Coast Guard in the United States through the Ports and Waterways Safety Act of 1972 (33 USC 1223). VTS San Francisco is responsible for the safety of vessel movements from the offshore approaches to San Francisco Bay and all navigable inland waterways to and including the inland Ports of Stockton and Sacramento. In 1995, Regulated Navigational Areas (RNAs) were established in the San Francisco Bay region, which were designed to improve navigation safety by organizing traffic flow patterns; reducing meeting, crossing, and overtaking situations in constricted channels; and by limiting vessel speeds.

### **Existing Authority Allowing VTS to Direct Vessel Movement**

The Work Group reviewed provisions included in the Federal Ports and Waterways Safety Act of 1972 (33 USC 1223), which states:

“[The Coast Guard] may control vessel traffic in areas subject to the jurisdiction of the United States which the Secretary [of the Department of Homeland Security] determines to be hazardous, or under conditions of reduced visibility, adverse weather, vessel congestion, or other hazardous circumstances by:

- (A) Specifying times of entry, movement, or departure;
- (B) Establishing vessel traffic routing schemes;
- (C) Establishing vessel size, speed, draft limitations and vessel operating conditions; and
- (D) Restricting operation, in any hazardous area or under hazardous conditions, to vessels which have particular operating characteristics or capabilities which he considers necessary for safe operation under the circumstances.”

This authority is directly granted to the VTS in 33 Code of Federal Regulations (CFR)161.11:

- “(a) A VTS may issue measures or directions to enhance navigation and vessel safety and to protect the marine environment, such as, but not limited to:
  - (1) Designating temporary reporting points and procedures;
  - (2) Imposing vessel operating requirements; or
  - (3) Establishing vessel traffic routing schemes.
- (b) During conditions of vessel congestion, restricted visibility, adverse weather, or other hazardous circumstances, a VTS may control, supervise, or otherwise manage traffic, by specifying times of entry, movement, or departure to, from, or within a VTS area.”

In reviewing this information, the PTP Work Group concluded the Captain of the Port has the authority to regulate all ship movements, which includes whether ships can or cannot proceed.

The Work Group further noted that the Coast Guard VTS is not equivalent to Air Traffic Control. A VTS area would best be compared to Class A controlled airspace. In Class A controlled airspace, all operations are conducted under Instrument Flight Rules and direct Air Traffic Control, unlike a VTS area where participation by many types of vessels (e.g., recreational boaters, fishing vessels, personal watercraft, etc.) is not required. Under normal conditions, VTS is advisory in nature, differing in its function from an air traffic control system in which air traffic controllers regularly direct the movement of aircraft with specific directional and speed commands. Only in cases of extreme circumstances will VTS direct vessels in a general outcome, such as avoiding a specific hazard of which the vessel may not be aware.

### **VTS Efforts in Response to the Cosco Busan Incident**

In addition, the Work Group asked the Coast Guard to describe what steps are being taken to improve internal processes. In response to the Cosco Busan incident, VTS conducted an extensive analysis, taking the following steps to enhance their prevention efforts:

1. VTS is modifying its operating and training processes to encourage more proactive prevention through concise communications, to better prepare operators to switch from the lower modes of traffic management (advising) to the more assertive directional modes (recommending/directing) when the need arises to prevent an accident.
2. VTS is developing a re-qualification program to ensure continuity of training of its veteran operators.
3. VTS will staff an additional operator position when fog limits visibility to less than 0.5 nautical miles, and will adjust their display scale for better anomalous traffic recognition.
4. Finally, the Coast Guard, San Francisco Bar Pilots and the Harbor Safety Committee are working together in the prevention process and developing recommendations to:
  - Identify high risk or “Critical Maneuvering Areas” in the Bay that require modified guidelines with respect to low visibility precautions.
  - Define inclement weather and the operational procedures that accompany those periods of reduced visibility.
  - Assemble mitigating “best practices and standards” for operations during these periods.

## **Could VTS Directions to the Cosco Busan Have Prevented the Accident?**

The Work Group concluded, based on known facts of the incident at the time of their discussions, that it is unlikely VTS direction could have prevented the allision, given the inertia of the 900-foot vessel and the limited time period when it became apparent that the vessel was off course, and the time of impact.

**Conclusion:** The Work Group concludes that adequate Coast Guard authority to regulate shipping and control vessel movements already exists in current law under the Federal Ports and Waterways Safety Act of 1972 (33 USC 1223) and 33CFR161.11; therefore, no additional authority is recommended. The Work Group concludes that the Coast Guard has adequate authority to regulate shipping and to control vessel movements in current law under the Federal Ports and Waterways Safety Act of 1972 (33 USC 1223) and 33CFR161.11. Further, the best skills for maneuvering a vessel originate from onboard the vessel itself, not from the VTS.

On rare occasions VTS will direct the movement or actions of a participant. Direction would be given in cases when the VTS observes obvious violations of regulations or an obvious and immediately dangerous condition of which the participant is not or does not seem to be aware. VTS directions will normally be in the form of a general objective such as staying out of a certain area or coming no closer than a certain distance from a vessel or object, thus allowing the pilot or operator to maneuver the vessel as necessary to comply with the direction. There are several reasons for this:

- The ultimate responsibility for safe navigation lies with the vessel master, as per 33CFR 161.11 and internationally accepted practice under International Regulations for Prevention of Collisions at Sea (72 COLREGS).
- VTS operators cannot know the specific handling characteristics of the vessels they may be directing and the dynamics on the bridge of the vessel.
- VTS operators will not have information about hazards undetected by VTS sensors such as smaller pleasure craft, swimmers, debris, etc.
- VTS Operators will not have the instantaneous knowledge of the many forces (wind, current, tidal current conditions, etc.) acting on the vessel, as would the vessel's master or pilot.

**Prevention Through People Work Group Recommendation:** The Harbor Safety Committee unanimously adopted the Prevention through People Work Group's findings and recommendations at its March 13, 2008 regular meeting. (Note: as a committee established by the State of California, all Harbor Safety Committee meetings are open to the public and publicly noticed and agendized under the provisions of the Ralph M. Brown Open Meeting Act.)