

Harbor Safety Committee

of the San Francisco Bay Region

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

**Special meeting of the Harbor Safety Committee of the San Francisco Bay Region:
The COSCO Busan Incident and Implications for Navigational Safety in the San Francisco Bay Region
Thursday, November 29, 2007
Firehouse Conference Center, Fort Mason Center, 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 1003. **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; **Margo Brown** (M), National Boating Federation ; **Capt. Pete Bonebakker** (M), Polar Tankers; **Sue Cauthen** (M), San Francisco Tomorrow; **Len Cardoza**, Port of Oakland (M); **Ron Chamberlain** (M), Port of Benicia; **Capt. John Cronin** (M), Matson Navigation Company; **John M. Davey** (M), Port of San Francisco; **Capt. Fred Henning** (M), Baydelta Maritime; **Capt. Bruce Horton** (M), San Francisco Bar Pilots (Bar Pilots); **Capt. Peter McIsaac**, (Bar Pilots); **Robert J. Lawrence** (M), U.S. Army Corps of Engineers (COE); **Pat Murphy** (M), Blue & Gold Fleet; **Richard Nagasaki** (A), Chevron Shipping Company; **William Nixon** (A), Transmarine navigation Corporation; **Linda Scourtis** (A), BCDC; **Capt. Ray Shipway** (A), International Organization of Masters, Mates, and Pilots; **Rich Smith** (M), Westar Marine Services; **Keith Stahnke** (A), San Francisco Bay Area Water Transit Authority (WTA); **Capt. David Swatland** (M), United States Coast Guard (USCG); **Denise Turner** (A); Port of San Francisco; **Gerry Wheaton** (M), National Oceanic and Atmospheric Administration (NOAA); **Thomas Wilson** (M), Port of Richmond.

Also present were **Lisa Curtis**, Administrator, California Office of Spill Prevention and Response, (OSPR); **Capt. Lynn Korwatch**, Marine Exchange; **Steve Ricks**, Marine Spill Response Corporation (MSRC); **Capt. Gary Toledo**, (OSPR). Representatives of many agencies and interests spoke during the meeting and, where possible, they are identified in context.

The meetings are always open to the public.

Approval of the Minutes

The minutes of the November 8, 2007 meeting were not on the agenda of this special meeting of the HSC.

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Comments by the Chair – Lundstrom

- Welcomed those in attendance.
- **Berge** is a member of the USCG Incident Specific Preparedness Review (ISPR).
- Gave a brief overview of the history of the HSC.
- The purpose of the meeting at hand was to gather information and raise questions about the *COSCO Busan* incident in order to meet the HSC's mission of preventing accidents. Governor Schwarzenegger has directed OSPR (and other state agencies) to launch an "aggressive, coordinated investigation" into the incident. The HSC is an asset of OSPR's, and provides it with a unique collection of maritime experts representing a wide gamut of stakeholders in the Bay Area – including local, state, and federal agencies.
 - An *ad hoc* workgroup to address safety issues arising from the multiple ongoing investigations of the incident will include the chairs of the standing workgroups since the issue spans all of their specialties. **Lundstrom** said that the issues outlined in the Governor's directive – speed restrictions, tug escorts, inclement weather sailing conditions, crew requirements in such conditions, navigational equipment, communications equipment, and communication between the Coast Guard's Vessel Traffic Service (VTS) and the *COSCO Busan* – would be assigned to the workgroup at its first meeting.
 - It is OSPR's goal for the *ad hoc* workgroup to complete its study and recommendations by mid February, 2008. All meetings of the workgroup are open to the public and anyone may sign up to be notified about them. **Lundstrom** will chair the workgroup. The chairs of the standing work groups are: **Capt. Bayer**, PORTS (Physical Oceanographic Real Time System); **Brown**, Prevention Through People; **Davey**, Ferry Operations; **Capt. Henning**, Tug Escort; and **Capt. Horton**, Navigation. Other members will be **Sean Kelley**, USCG; **Lt. Cmdr. Kevin Mohr**, USCG; and **Wheaton**, NOAA.
 - Introduced **Curtis** to make opening comments.

Comments by the OSPR Administrator – Curtis

- Thanked the members of the HSC for their hard work in a volunteer capacity. The maritime expertise represented by the committee will be an invaluable resource to meet the goals for investigation and policy recommendation required by the Governor's directive in response to the incident.

Coast Guard Briefing – Capt. Swatland

- Thanked the HSC for being a vibrant, diverse, and productive forum.
- There are ongoing investigations by a number of regulatory agencies so it would be impossible to comment on evidence or conclusions. The USCG is also conducting its own investigation into the cause of the allision per the Code of Federal Regulations, Title 46–Shipping, Part 4.
 - The ISPR, that **Berge** is a member of, will be looking at all aspects of the USCG's response to the incident per its responsibilities.
 - Up to date information, and links to additional information, about the incident and the response can be found at www.coscobusanincident.com.

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- The USCG Vessel Traffic Service San Francisco (VTS) was the first of twelve to be created in the nation under the mandate of the Ports and Waterways Safety Act of 1972. It is responsible for approximately 140,000 transits through Bay Area waters as well as 1,200 marine events. VTS is not at all similar to an air traffic control system. It can order anchoring or certain other operations under specific circumstances described in the 1978 Port and Tanker Safety Act. But it can only direct outcomes, not specifics like course or speed.

There were questions and comments:

Brown said it would be useful for the ad hoc work group to have hard copies of the pertinent laws and regulations governing the actions of the USCG.

Cauthen said that USCG could have done a better job of getting news out by creating a phone bank or some other messaging service.

Wheaton asked how the work group could complete its work by mid February since it was dependent on integrating information from other investigations. **Lundstrom** said that the process was an evolving one. OSPR will provide guidance to establish what is needed in a timely manner, and not to duplicate the efforts of other investigations. **Curtis** said the mid-February date was only a target. **Capt. Swatland** said that the results of all USCG investigations would be made public.

Capt. Bayer asked when the Coast Guard report was due. **Capt. Swatland** said that there was no specific timeline, but the investigation was a top priority.

Wheaton suggested that the other California HSC's be invited to review the drafts of the work group. **Lundstrom** said that was a good idea.

Cauthen asked if the ship had adequate insurance and response plan. **Capt. Swatland** said that they had what was required by state and federal law. **Cauthen** asked if the linguistic ability of the crew affected the quality of the response plan. **Capt. Swatland** said that the plan was a requirement on the owner of the vessel in order to operate in US waters.

Lundstrom asked USCG to supply a list of other local bridges that had been struck along with the conclusions as to why. **David Souloff**, Chief of the Bridge Section for the Eleventh Coast Guard District, said he could provide that.

Mike Dillabough, COE, said that they had recovered fifteen tons of fendering material after the allision. He said that much of it had been floating beneath the surface of the water in several large pieces. **Lundstrom** thanked him for raising the point. She said that fendering is a topic of concern covered in the *Harbor Safety Plan*.

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Capt. Horton said that the Bar Pilots are conducting their own internal review of ways to prevent such incidents. Things they are looking at include enhanced electronic aids for the pilots, restrictions on vessel movements in fog, bridge protection to reduce damage, and the adequacy of buoys. **Lundstrom** asked the bar Pilots to share the results of their review. **Capt. McIsaac** said that they would. **Lundstrom** said that there was already a provision in the local safety plan covering operations in fog, and added that OSPR was asking all of the HSC's to add local "best practices" to their plans.

Berge suggested that the HSC reach out to the State Board of Pilot Commissioners.

Cardoza said that the owners and operators of local bridges should be contacted about fendering.

Wilson said that it looked as if the work group would need to make a list of all of the investigations and their jurisdictions.

Ellen Johnck, Bay Planning Coalition, suggested that the work group look into the adequacy of channel depths and widths approaching local bridges. **Capt. Bayer** suggested that a representative from the COE be involved in the work group. **Capt. Swatland** said that the investigations of the USCG, and National Transportation Safety Bureau (NTSB), are looking at channels. That information will be public when the investigations are complete. **Capt. Bayer** asked if there could be any preliminary release of such information during the course of the investigation. **Capt. Swatland** said that they would do what they could under the circumstances. **Cauthen** asked how long the NTSB investigation would take. **Capt. Swatland** said that they were scheduled for a year. **Cauthen** then asked how long the USCG investigation would take. **Capt. Swatland** expressed the hope that it would be much quicker.

Curtis said that OSPR would support the work group's effort to collate information from all of the investigations. Part of their goal is to learn from all of the other investigations and develop recommendations that can be plugged into OSPR's strategic plan.

Capt. Shipway asked if the qualifications of responders would be part of OSPR's own investigation. **Curtis** said that they were. **Capt. Shipway** asked if the response had been affected by a variety of equipment or training standards among the private sector responders. **Curtis** said that California had the most stringent standards in the nation for certification.

Cardoza said that there needed to be an inventory of all available human resources and equipment from any source in the Bay Area.

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Booming on Open Waters – Ricks

- The tides and currents in the Bay always create a challenging environment. The fog that morning was especially bad, so there was no aerial observation possible in the immediate aftermath. The only way to track the extent and movement of the spill was by leaning over the edge of a vessel in limited visibility.
- When currents exceed one knot they tip the booms so that the oil goes over or under the boom. The current at the time of the allision was in excess of one knot. In those circumstances normal practice is to place the boom at angles to the current and funnel the oil to a skimmer. Because of the extremely limited visibility, and lack of certainty about where the oil was, they could not run that type of operation that morning. Once booms are in the water they are extremely difficult to redeploy in a timely manner.

There were questions and comments:

Lundstrom asked how much oil could be recovered under ideal circumstances. **Ricks** said that twenty percent was an ideal recovery. He said that forty percent evaporated pretty quickly, and that human or natural dispersants accounted for another ten to fifteen percent.

Wheaton asked if MSRC participated in planning where to locate response vessels. **Ricks** said that they followed the direction from the Incident Commander.

Brown asked if PORTS would have helped in tracking the oil. **Ricks** said that he couldn't answer that. **Capt. Swatland** said that NOAA had been contacted, but that their oil spill mapping hadn't worked out.

Lawrence asked about the availability of aerial observation. **Ricks** said that the helicopter was grounded till 1330, and not over the site of spill till 1400.

Someone from the audience asked what was wrong with the NOAA spill map and how they would address the problem in the future. **Lundstrom** added that there had also been problems with the spill projections after the *Cape Mohican* incident. **Wheaton** introduced **Stephen Lehmann**, NOAA Scientific Support coordinator for the North East. **Lehmann** said that NOAA is always working to improve its models. He said that more sensor input is always helpful, but added that they also rely a great deal on aerial observation. **Wheaton** said that new technologies, like surface current sensors, are starting to come online. He added that NOAA also has to work out how to deliver new information in ways that are useful.

Discussion: Issues and Possible Future Recommendations by the HSC

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Lundstrom opened the meeting to a public brain-storming session within the guidelines outlined in Governor Schwarzenegger's directive to make recommendations for preventing navigation accidents. The following issues were suggested by members of the HSC and the public in attendance.

- Speed restrictions during inclement weather
- Best practices for a variety of environmental circumstances when in the vicinity of bridges, other structures, busy channels, and the like.
- Departure checklists.
- Local training and local knowledge.
- Language issues.
- Crew size.
- Tug escorts or tug leaders.
- Oil tankers going no further than the Chevron facility in Richmond and moving the oil by pipe line.
- Channel width and depth.
- Are there sufficient aids to navigation?
- New technologies like GPS and laptops. What technologies are deployed in other places?
- Low tech solutions like foghorns should not be forgotten. Are more needed? Are they properly maintained? Can they be heard on the bridge of a large ship over engine and other noise?
- Standardization of bridge navigation technologies.
- Communications equipment.
- VTS guidance in extreme circumstances. Do they have the authority they need?
- Communications procedures. Not just up and down the chain of command but laterally as well.
- Fatigue or other factors that could affect the crew.
- Is there a need to have translators available?

Kenneth Levin, Bar Pilots, asked how the work group could handle all of these issues without support staff. **Lundstrom** said that it all would have to be sorted out and that OSPR would help provide guidance. **Capt. Swatland** said that he thought that results from the various investigations would answer many questions and help focus the direction of the workgroup's efforts.

Public Comment

A member of the public suggested that the workgroup should also look at new types of containment technology.

Next Meeting

Lundstrom said that the first meeting of the *COSCO Busan ad hoc* workgroup was scheduled for December 14, 2007.

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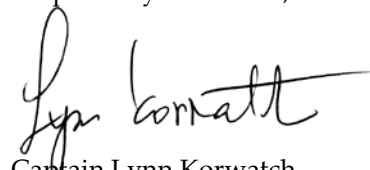
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Steinbrugge said that the next regular meeting of the HSC would convene at 1000, January 10, 2008, at the Port of Richmond's Harbor Master's Office.

Adjournment

Lundstrom gaveled the meeting at 1211.

Respectfully submitted,



Captain Lynn Korwatch
Executive Secretary



GOVERNOR CALLS FOR COMPREHENSIVE STATE INVESTIGATION INTO OIL SPILL

In response to the 58,000 gallon oil spill into the San Francisco Bay on November 7, Governor Schwarzenegger today called for a full state investigation into the causes of the spill.

"Any delays that hamper response and cleanup efforts are completely unacceptable," Governor Schwarzenegger said. "We will investigate the full breadth of the incident and get all of the answers. I want to assure all Californians that we will take any action necessary to prevent this from ever happening again."

State Agencies Launch a Full Investigation

Governor Schwarzenegger directed his Department of Fish and Game, Office of Spill Prevention and Response and Office of Emergency Services to conduct an aggressive, coordinated investigation into the causes of and response to the oil spill. He has also offered the state's full cooperation with any federal investigations regarding this emergency.

The Governor's investigation will be led by OSPR in coordination with DFG and OES. The investigation will identify civil and criminal liability and review procedures including 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; and Identify areas for improvement in response, notification and clean up.

Although we must wait for these investigations to be complete, the Governor does not believe it is too early to start looking at potential policy changes. It is our responsibility to see what caused this oil spill and take every step to ensure changes are made, whether they are federal, state or local, to ensure something like this does not happen again.

Specifically, the investigation will analyze:

- Operational issues with vessels entering and leaving the San Francisco Bay. Why did this vessel collide with the fender of the Bay Bridge?
 - Issues that will be examined include speed limit restriction, tugboat escorts, inclement weather sailing conditions and limits and crew staffing requirements during these conditions.
- Navigational Tools and Vessel Communication. What were the mechanical/human failures?
 - Issues that will be examined include all communications and navigational equipment associated with vessel traffic, such as the Vessel Traffic Service System and the Physical Oceanographic Real Time System (PORTS).
- Communication Response. Why were there delays in communications and a failure to properly notify all impacted areas?
 - Issues that will be examined include rapid response communication, inter-governmental communications, notifications with local communities and the general public.
- Cleanup and Rapid Response Capabilities; Integrating Volunteers. Were there sufficient and adequate resources available and deployed to properly manage a spill of this magnitude? How can we promptly utilize volunteers, while also ensuring the safety of these individuals?
 - Issues that will be examined include how quickly federal, state and local resources were deployed to deal with the spill, how resource needs were determined based upon initial and subsequent assessment of the quantity of oil spilled and how quickly additional resources were notified to handle wildlife and marine life issues.

The State's Response to the Bay Area Oil Spill

The State's agencies and departments responded immediately to the oil spill, and the State continues to support containment and cleanup efforts in the Bay.

Office of the Governor

- **Issued An Emergency Declaration To Devote Additional State Resources.** The Governor proclaimed a State of Emergency on November 9, 2007, to free up additional state resources and directed OSPR to tap into a state-maintained, industry-supported trust fund to ensure that all possible resources are being utilized to expedite the cleanup process. The Governor also ordered the California Conservation Corps, CalFire, and CaliforniaVolunteers to work proactively to ensure all resources are available for cleanup.
- **Issued An Executive Order To Protect Public Health.** The Governor issued an Executive Order on November 13, 2007, to suspend all fishing for human consumption in areas affected by the spill. He also directed the Office of Environmental Health Hazard Assessment in consultation with the California Department of Public Health to expeditiously review the available scientific information on whether a significant human health risk is posed by the consumption of marine life caught in the threatened area.

Department Of Fish And Game -- Office of Spill Prevention and Response (OSPR)

- **Responded Immediately To The Spill.** OSPR responded immediately to the spill, sending a team consisting of a warden, biologist and oil spill prevention specialist to examine the area and assess how to proceed.
- **Established A Unified Command To Coordinate Response.** OSPR, U.S. Coast Guard and the responsible party's cleanup company (O'Brien Group) established a Unified Command to ensure a unified response.
- **Placed Containment Boom To Protect Wildlife And Beaches.** In conjunction with federal, local and private vessels, OSPR placed more than five miles (approximately 27,500 ft) of containment boom to protect the Bay's wildlife and beaches.
- **Supporting Ongoing Investigations Into The Spill.** OSPR is supporting the National Transportation Safety Board's independent investigation into the cause of the incident and the federal criminal investigation being led by the U.S. Attorney's Office (Northern District of California).
- **Leading Ongoing Cleanup Efforts.** OSPR has seven Shoreline Assessment Teams evaluating where additional cleanup is necessary and how it can be done in the most environmentally friendly manner. Eleven teams are using this information to continue beach cleanup, concentrating efforts in San Francisco and Marin County. There are 525 personnel assigned to these teams.
- **Leading Wildlife Recovery Efforts.** The Department of Fish and Game has assigned seven additional game wardens to wildlife recovery and security operations, and 27 Oiled Wildlife Care staff and 162 volunteers are at the Cordelia bird treatment facility. Twenty wildlife teams made up of 40 search-and-recovery personnel are collecting wildlife in affected areas.
- **Training Volunteers.** Approximately 500 volunteers have received training through OSPR and been certified to assist in the emergency oil spill response. The Department of Fish and Game, in conjunction with the Oiled Wildlife Care Network, has been utilizing 400 pre-trained volunteers. They have trained an additional 350 volunteers from the public who showed up to assist in the oiled wildlife rehabilitation efforts.
- **Providing Public Information.** Unified command, working with its partners, established hotlines to: report oil sightings (985-781-0804); report oiled wildlife (877-823-6926); file cost and loss claims (866-442-9650) and volunteer (800-228-4544). The Department of Fish and Game is also providing ongoing updates on the spill at its website, <http://www.dfg.ca.gov/>.

Office of Emergency Services (OES)

- Supporting Spill Notification Operations. In accordance with Spill Notification Protocols, the OES California State Warning Center (CSWC) notified state, local and federal partners of the spill and continues to provide updates and notifications.
- Coordinating And Providing Resources. OES staff continues to coordinate resources and provide support to federal, state and local officials. OES staff was on scene the day the spill occurred and dispatched a fire and rescue chief, law enforcement chief, hazardous-materials specialist, OES coastal region staff, medical and safety personnel. OES also sent equipment to support incident command.

California Department of Transportation (Caltrans)

- Immediately Assessed The Impact Of The Collision With A Fender of The Bay Bridge. Caltrans immediately assessed the impact of the collision with a fender of the bridge and reported no concerns for vehicle traffic. Additional assessments continue.
- Repairing Damage To The Bay Bridge. Consistent with the Governor's emergency declaration, Caltrans is taking immediate steps to repair and restore any damage caused to the fender of the western span of the Bay Bridge.

San Francisco Region PORTS System

Tide Stations with Wind speed and Direction, Water Temperature, Air Temperature, and Barometric Pressure Sensors;

1. Port Chicago (part of NOAA's National Network).
2. Chevron Richmond Wharf.
3. Golden Gate Bridge, at the Old Coast Guard Station (part of NOAA's National Network)
4. Alameda Point, old Naval Air Station (part of NOAA's National Network).
5. Port of Redwood City Wharf 5.

Wind Speed and Direction Sensors

1. Oakland Middle Harbor Park, at the entrance to the Oakland Inner Harbor between Oakland and Alameda.

Current Sensors

1. Martinez, Tesoro Amorco wharf by the Martinez-Benicia Bridges.
2. Southampton Shoal Channel, buoy mounted off the Chevron Richmond Wharf (awaiting ocean type buoy from the USCG).
3. Oakland Bar Channel, buoy mounted (awaiting ocean type buoy from the USCG).

Data Availability

1. Over the internet at
<http://tidesandcurrents.noaa.gov/sfports/sfports.shtml?port=sf>
2. Voice data response system:
1-866-SB-PORTS (1-866-727-6787)