

Mandated by the California Oil Spill Prevention and Response Act of 1990 Harbor Safety Committee of the San Francisco Bay Region Thursday, May 12, 2011 Pier 1, Port of San Francisco, San Francisco, California

Joan Lundstrom, Chair of the Harbor Safety Committee of the San Francisco Bay Region (HSC), San Francisco Bay Conservation and Development Commission (BCDC); called the meeting to order at 1007. **Alan Steinbrugge**, Marine Exchange of the San Francisco Bay Region (Marine Exchange), confirmed the presence of a quorum of the HSC.

Committee members (M) and alternates (A) in attendance with a vote: Capt. Esam Amso (A), Valero Marketing and Supply Company; John Berge (M), Pacific Merchant Shipping Association; Margot Brown (M), National Boating Federation; Capt. John Cronin (M), Matson navigation; Lt. Col. Torrey DeCiro, United States Army Corps of Engineers (USACE); Capt. Jack Going (A), BayDelta Maritime; Aaron Golbus (M); Port of San Francisco; Capt. Bruce Horton (A), San Francisco Bar Pilot (Bar Pilots); Capt. Pat Murphy (M), Blue & Gold Fleet; Capt. Eric Osen (M), Chevron Shipping Company; Chris Peterson (M), Port of Oakland; Deb Self (A), San Francisco Bay Keeper; Rich Smith (M), Westar Marine Services; Capt. Cynthia L. Stowe, United States Coast Guard (USCG); Gerry Wheaton, National Oceanographic and Atmospheric Administration (NOAA);

Alternates present, and those reporting to the HSC on agenda items: **David Stephens**, California State Lands Commission (State Lands); **Capt. Jeff Cowan**, California Office of Spill Prevention and Response (OSPR), **Tom Evans**, National Weather Service (NWS), **Capt. Noapose Fotu** (A), National Cargo Bureau; **Lt. Cmdr. DesaRae Janzen**, USCG, **Sean Kelley**, USCG; **Heather Kerkering**, Central & Northern California Ocean Observing System (CeNCOOS); **Paul Milkey**, California Air Resources Board (ARB); **William Needham** (A), National Boating Federation; **Rob Lawrence**, USACE; **Walt Partika** (A), Foss Maritime; **Linda Scourtis** (A), BCDC, **David Stevens**, California State Lands Commission (State Lands); **Lt. Cmdr. John Taylor**, USCG.

The meetings are always open to the public.

Approval of the Minutes

There was a correction to the minutes of the meeting of April 14, 2011. The second line of the fourth paragraph on page five should read: "to Representative **Nancy Pelosi**, Senator **Diane Feinstein**, and Senator **Barbara Boxer** . . . ".

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



Mandated by the California Oil Spill Prevention and Response Act of 1990 Comments by the Chair – Lundstrom

- The letters in support of House Bill 104 and Senate Bill that the HSC had voted on at the April meeting had been sent. **Lundstrom** thanked **Capt. John Schneider** (M), Tesoro Refining & Marketing for working with USACE to get the numbers right for the letter. The gist of the letters was for the Bay Area to get its fair share of the funds and importance of fully funded maintenance to safety on Bay Area waters.
- Lundstrom drew attention to the report on loss of propulsion incidents provided by District 11 of the USCG that is attached to the minutes each month. Out of twenty five incidents from the beginning of the year through the end of April only eight could be directly attributed to fuel switching. The USCG was concerned and had already held one workshop on the matter. The HSC would also be following and monitoring developments to see where it could help.
- Lundstrom announced that she would be resigning from the HSC July 1, 2011 to marry Louis Schwartz, whom she asked to stand. They were very excited for the future and were looking forward to traveling and other activities. There was applause. Lundstrom said that she was very proud of this fabulous HSC, and said that she had enjoyed every minute of her years as a member, and for the seven years that she was the chair. Lundstrom noted that Brown and she were plank holders of the HSC. There was more applause.

Coast Guard Report - Capt. Stowe

- **Capt. Stowe** thanked **Lundstrom** for her leadership that had made this HSC one of the premier HSCs in the nation.
- Lt. Cmdr. Taylor would give a report on the loss of propulsion workshop the USCG had held in March. The issue continues to be of great concern to them.
- Planning for America's Cup events continues. They were in the process of drafting special local regulations and hoped to have them out soon for public comment.
- Lt. Cmdr Janzen read from a report that is attached to these minutes.

Needham asked if the USCG provided instructions to the Bar Pilots in cases where there problems vessels with engine starting cycle problems. **Lt. Cmdr Taylor** said that they had instructed the masters of the vessels to provide proper instruction to their bar pilots.

Berge said that he had seen an article where the loss of propulsion on the *Horizon Falcon* had been due to fuel quality. He asked whether the USCG followed up, and if so how. **Lt. Cmdr. Taylor** said that the there had been excessive water in the fuel on the *Horizon Falcon* and said that they do follow up with the ship to see where they purchased the fuel. They then follow up with the vendor.

Capt. Cowan asked whether the start cycle problems reported on could be attributed to the use of marine gas-oil (MGO)? **Lt. Cmdr. Taylor** said that the problems were that the vessels had not gone through their normal start cycles.



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• Lt. Cmdr. Taylor summarized the minutes of the loss of propulsion workshop that the USCG had held on March 16. Those minutes are attached to these minutes.

Wheaton suggested that the loss of propulsion issue be addressed as a state-wide issue by all of the HSC's. Capt. Stowe said that the USCG follows the issue as a state-wide one through District 11. Lundstrom noted that state-wide numbers are attached to minutes. Lt. Cmdr. Taylor said that the information they are collecting is being forwarded to USCG Headquarters since all parts of the country will face similar problems when they come under Emission Control Area (ECA) regulations.

Capt. Horton asked if it was the case that the three-start cycles were controlled by a programming module. **Lt. Cmdr. Taylor** said that was the case. **Capt. Horton** asked in what situations the programming modules should be over-ridden and engine starting transferred to engineering control. **Lt. Cmdr. Taylor** said that the bar pilots have to use their best judgment and keep the USCG informed of their actions.

Capt. Cowan asked whether there would be another workshop on loss of propulsion. Capt. Stowe said there would be more since they were a great forum for exchanging information. Lundstrom said that any best maritime practices resulting from the workshops could be memorialized in the *Harbor Safety Plan*. Lundstrom said that Capt. John Betz, chair of the Los Angeles/Long Beach HSC was in attendance and that they too had an interest in making sure that best practices were not lost in workgroup minutes. Capt. Betz said that a gathering of the state HSC's would be a good thing. He added that there were likely to be even more loss of propulsion reports from their area since they had recently come under new Federal reporting standards.

Capt. Stowe asked **Kelley** when the anchoring scheme described at the March 10 meeting of the HSC would be ready for memorializing. **Kelley** said that the scheme was still in the recommended phase for testing and comments through the end of the year. The goal for memorializing the scheme in the *Harbor Safety Plan* and *Coast Pilot* is the 2012 editions of those publications. He said that the system seemed to be working well so far.

Capt. Amso asked if vessels were tending to crowd up on the western side of Anchorage 9. **Kelley** said that smaller vessels and vessels expecting a prolonged stay were sticking to the east side of the anchorage and leaving the west side for vessels with deeper drafts.

Capt. Stowe said that the USCG is still looking at getting funding for fog sensors, and is still looking for local partners to monitor the fog at their locations

US Army Corp of Engineers Report - Lt. Col. DeCiro

• Lt. Col. DeCiro thanked Lundstrom for her leadership of the HSC. He said that the HSC had a great environment to come into as a newcomer and was one of the organizations where things get done, as Lt. Col. Laurence M. Farrell, USACE, his predecessor had said.



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- There were no changes to the President's proposed budget.
- Lawrence read from a report that is attached to these minutes.

Capt. Amso asked about the schedules for dredging and surveying Pinole Shoals. Lawrence said the dredging would likely happen later in the summer. Surveys were ongoing in those parts of the channel to be realigned.

Capt. Horton said that the depth of the channel at the Union Pacific Railroad drawbridge was only thirty-feet which would have a big impact on commerce upstream from there. He asked about the possibility of emergency surveys and emergency dredging. **Lt. Col DeCiro** said that emergency surveys could be done but that there was no funding to for emergency dredging. In the normal schedule dredging Suisun would follow Pinole Shoals. **Capt. Horton** expressed his concern about changes to the depth of the channel with a higher than normal spring runoff. He said that the Bar Pilots did not want to discover a change in depth by scraping bottom.

Lundstrom told **Capt. Murphy** that the Ferry Operations Workgroup had been nominated at the April meeting of the HSC to look into the effects of the President's proposed budget on debris removal.

Lt. Col. DeCiro reported that the dredge *Essayons* would arrive in the Bay Area on June 17. The tentative dredging schedule was Richmond for late July, Suisun Bay for early August, Oakland for mid-August, Redwood City for early September, and San Rafael for late September.

Clearing House Report - Steinbrugge

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

OSPR Report - Capt. Cowan

- There are openings on the HSC to represent tanker operators and commercial fishing. OSPR intends to fill the openings by June 9, 2011.
- OSPR is conducting some preliminary work with the production company that did the video for Washington State on best bunker practices. The project cannot move ahead until OSPR has a budget.

Lundstrom said that the video had been identified by the Tug Operations Workgroup as a useful starting point for educating people about best maritime practices for bunkering at anchorage. The video needs to be updated and made specific to our region. The goal is a cost-effective way to prevent human error through training.

NOAA Report - Wheaton

• **Wheaton** gave a tour of the NOAA website, especially the products and features available for free through http://www.noaa.gov/charts.html.



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Winter Runoff and Fresh Water Predictions for San Francisco Bay - Evans

- **Evans** said that the storms expected over the up-coming week would be cold enough so that they would not affect spring runoff.
- Evans gave a presentation on expected spring runoff that is attached to these minutes.
- Current river conditions can be found at http://cdec.water.ca.gov/river/rivcond.html and http://www.cnrfc.noaa.gov/. Other sites of interest on this topic are: http://www.cnrfc.noaa.gov/water_supply.php and http://www.water.ca.gov/floodmgmt/.

Capt. Amso asked if the siltation effect of the spring runoff could be predicted. **Evans** said that that could not be predicted but it would be safe to say that the siltation would be greater in a high runoff year. **Lt. Col DeCiro** said that he was not aware of any research that had been done to create a useful model. **Evans** said that he would follow up to see if any work had been done on the topic.

Kerkering asked when river conditions would be back to normal flow. **Evans** said that would happen around the end of June or beginning of July.

Physical Oceanographic Real Time System (PORTS) and CeNCOOS Products for America's Cup Events – Kerkering

- **Kerkering** had met with the workgroup on March 28 and representatives of the America's Cup Race Management (ACRM) team to discuss what ocean observation products were currently available from NOAA and CeNCOOS, and to identify what products are needed.
- ACRM has also hired Tidetech and WeatherFlow to analyze data provided by NOAA and CeNCOOS. Their model needs are complex, as for example wind data at every foot of altitude from water level to the top of their masts which are one hundred-twenty feet high. The goal of ACRM is to create a product that can be given to the public as a legacy. All of the data collected by NOAA and CeNCOOS will be public.

Wheaton asked when the next meeting with ACRM would be held. **Kerkering** said that it would be after their current round of races in New Zealand.

State Lands Report - Stephens

Stephens read from a report that is attached to these minutes.

Air Resources Board (ARB) Report – Milkey

• Milkey read from a report that is attached to these minutes. In addition to the usual numbers on modification and safety exemptions is information on proposed amendments to the existing regulations. Contact information for ARB is always included at the last page of the report.



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Capt. Allen Garfinkel, California Board of Pilot Commissioners for the Bays of San Francisco, San Pablo, and Suisun; asked who should be called if a vessel needed a safety exemption. **Milkey** said that a safety exemption could be decided on at the moment needed and that ARB could be contacted with the details after the situation was over. **Capt. Garfinkel** asked if that information was in *The Coast Pilot*. **Wheaton** said that it was not.

Berge asked what was happening with the money from non-compliance fees. **Milkey** said that it was going back into the ARB general fund.

Lundstrom noted that those that wanted to comment on the proposed amendments to the regulations could submit them online at:

http://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=ogv11&comm_period=A. The proposed changes can be reviewed here: http://www.arb.ca.gov/regact/2011/ogv11/ogv11.htm

Lundstrom asked **Milkey** to notify the HSC when final report on fuel switching was released by the California Maritime Academy.

Tug Work Group – Vote Anticipated – HSC Request to Fund Revising and Licensing of Washington State Training Video on Best Bunkering Practices at an Estimated Cost of \$9,500 – Lundstrom

• **Lundstrom** read from the notes of the Tug Operations Workgroup Meeting of May 5 that described the option of updating the video from Washington State for local purposes.

Since there were no questions or comments on the proposal, **Lundstrom** asked for a motion in favor of requesting funds from OSPR to update the video on best bunkering practices from Washington State. The motion was made and seconded. It passed unanimously.

Navigation Work Group -

• Capt. Horton said that some of the items on the agenda for their next meeting would be, fog sensors, the effect on some ferry routes of realigning the north bay ship channel, and the effect of a reduction in debris removal that could be caused by the President's budget proposal.

Ferry Operation Work Group -

• There was nothing to report. **Lundstrom** tasked them with taking up the issue of debris removal.

Dredge Issues and PORTS Work Groups -

There was nothing to report.



Mandated by the California Oil Spill Prevention and Response Act of 1990 Prevention through People Work Group – Brown

There was nothing to report.

Plan Update Work Group - Scourtis

• They were on schedule to have the updated *Harbor Safety Plan* presented to the HSC for a vote at the June meeting.

PORTS Report - Steinbrugge

- Sensors had been installed at Oakland, Rodeo, and Pittsburg. They were expected to be online in May after they were vetted by NOAA.
- Sensors for AMORCO and Avon are scheduled for autumn.
- The new sensor for San Francisco Pier 31 is being studied for possible installation by the end of the year. The sensor at Pier 1 was scheduled for May.
- The sensor at the Union Pacific Railroad Drawbridge continued to be problematic.
- Buoy-mounted sensors were scheduled for maintenance.

Public Comment

Catherine Hooper, Fleet Week Association, said that they expecting twelve vessels for the Parade of Ships on October 8; they are to include an aircraft carrier, amphibious landing ship, four Canadian ships and the USCG's newest cutter. The senior leadership seminar on disaster preparedness would include **Adm. Thad Allen**, (USCG Ret.) and **Governor Haley Barbour** to talk about the *Deepwater Horizon* response and the Navy admiral leading the US response to the earthquake and tsunami in Japan.

Kerkering said that anyone interested to learn more about the legacy product described during her briefing could email **Penny Haire** of Tidetech at <u>penny.haire@tidetech.org</u>.

Old Business

There was none.

New Business

Charles P. Costanzo introduced himself as the vice-president for the Pacific Region of America's Waterways Operators, and said that he looked forward to attending future meetings of the HSC.



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

Lundstrom said that the next meeting of the HSC would commence at 1000, Thursday June 9, at the Port of Oakland's Exhibit Room, 530 Water Street, Oakland California.

Adjournment

A motion to adjourn was made and seconded. It passed without discussion or dissent. **Lundstrom** adjourned the meeting at 1200.

Respectfully submitted:

Capt./Lynn Korwatch

PREVENTION / RESPONSE - SAN FRANCISCO HARBOR SAFETY STATISTICS				
April-11				
PORT SAFETY CATEGORIES				
Total Number of Port State Control Detentions for period:	0			
SOLAS (0), MARPOL (0), ISM (0), ISPS (0)				
2. Total Number of COTP Orders for the period:	3			
Navigation Safety (3), Port Safety & Security (0), ANOA (0)				
3. Marine Casualties (reportable CG 2692) within SF Bay: Allision (0), Collision (0), Fire (0), Grounding (0),	4			
Sinking (0), Steering (0), Propulsion (4), Personnel (0), Other (0), Power (0)				
4. Total Number of (routine) Navigation Safety related issues / Letters of Deviation: Radar (2) Gyro (0),	3			
Steering (0), Echo sounder (0), AIS (1), AIS-835 (0), ARPA (0), SPD LOG (0), R.C. (0), Other (0)				
5. Reported or Verified "Rule 9" or other Navigational Rule Violations within SF Bay: None	0			
6. Significant Waterway events or Navigation related cases for the period: None	0			
7. Maritime Safety Information Bulletins (MSIBs): None	0			
Total Port Safety (PS) Cases opened for the period:	10			
MARINE POLLUTION RESPONSE	<u> </u>			
* Source Identification (Discharges):				
TOTAL VESSELS	6			
U.S. Commercial Vessels	1			
Foreign Freight Vessels	1			
Public Vessels	0			
Commercial Fishing Vessels	0			
Recreational Vessels	4			
TOTAL FACILITIES Regulated Waterfront Facilities	5 0			
Regulated Waterfront Facilities - Fuel Transfer	0			
Other Land Sources	5			
Mystery Spills - Unknown Sources	8			
Total Oil/Hazmat Pollution Incidents within San Francisco Bay for Period	19			
1. Spills < 10 gallons	3			
2. Spills 10 - 100 gallons	0			
3. Spills 100 - 1000 gallons	0			
4. Spills > 1000 gallons	0			
5. Spills - Unknown	16			
TOTAL OIL DISCHARGE AND HAZARDOUS MATERIALS RELEASE VOLUMES BY SPILL SIZE CATEGORY:	2			
Estimated spill amount from U.S. Commercial Vessels:	1			
Estimated spill amount from Foreign Freight Vessels:	0			
2. Estimated spill amount from Public Vessels:	0			
3. Estimated spill amount from Commercial Fishing Vessels:	0			
4. Estimated spill amount from Recreational Vessels:	1			
5. Estimated spill amount from Regulated Waterfront Facilities:	0			
6. Estimated spill amount from Regulated Waterfront Facilities - Fuel Transfer:	0			
7. Estimated spill amount from Other Land Sources:	3			
8. Estimated spill amount from Unknown sources:	5			
TOTAL OIL DISCHARGE AND/OR HAZARDOUS MATERIAL RELEASE VOLUMES (GALLONS):	10			
Civil Penalty Cases for Period	0			
Notice of Violations (TKs)	0			
Letters of Warning	0			
TOTAL PENALTY ACTIONS:	0			

SIGNIFICANT PORT SAFETY AND SECURITY CASES (April 2011)

MARINE CASUALTIES - PROPULSION/STEERING

Loss of Propulsion (LOP), Ferry ZELINSKY, (20 Apr): Low voltage in one bank of batteries resulted in a problem with the starboard engine control system and an engine fail safe (stop). Ferry restarted and safely finished transit to SF Pier 41. Batteries have been replaced. Case pends.

Loss of Propulsion (LOP), T/V ZALIV AMURSKIY (27 Apr): When attempting dead slow ahead engine failed to start on first attempt. The system automatically makes a second and possibly a third attempt before alarming. After the first failure, instead of allowing the system to make a second attempt the engine control from bridge was placed in stop position. CG inspectors and class society rep attended vessel and found it to be operating properly and there were no mechanical issues directly related to use of MGO fuel. COTP order was lifted.

Loss of Propulsion (LOP), M/V HORIZON FALCON, (28 Apr): Loss of propulsion due to contaminated fuel oil. System flushed and fuel oil ran through separators to clean. Vessel allowed to depart.

Loss of Propulsion (LOP), M/V STAR ISMENE (30 Apr): Loss of propulsion occurred after vessel did not immediately respond to a dead slow ahead command. Instead of allowing the automation to make a second start attempt, the engine control was brought to stop and back to dead slow ahead several times causing a fault alarm disabling bridge control. Engineers took control and successfully started engine locally from engine room. CG inspectors and class society rep attended vessel and found it to be operating properly and there were no mechanical issues directly related to use of MGO fuel. COTP order was lifted.

VESSEL SAFETY CONDITIONS

None

GENERAL SAFETY CASES

None

NAVIGATIONAL SAFETY

Letter of Deviation (LOD) X-Band Radar, M/V PRIMROSE (07 Apr): Vsl issued an inbound LOD.

Letter of Deviation (LOD) X-Band Radar, IM/V HAIMINIONIA PACIFICUM (19 Apr): VSI ISSUED INDOUND AND OUTDOUND

Letter of Deviation (LOD) Automatic Identification System, M/V CSL TRAILBLAZER (26 Apr): Vsl issued an inbound LOD.

SIGNIFICANT INCIDENT MANAGEMENT DIVISION CASES

None

Loss of Propulsion Conference

Minutes

16 March 2011

30+ people in attendance from industry, California Sate, and USCG (Sectors San Diego, LA/LB, San Francisco, and Puget Sound; D11 and CG-5213)

- "Fuel Switching" by Rob Jackson, California Maritime Academy
 - Fuel-related Risk Factors
 - Viscosity and Change in fuel from previous years
 - Crew unfamiliarity with change-over process
 - Physical differences between HFO and MDO/MGO
 - o viscosity, lubricity, & energy content
 - Spray pattern within the cylinder and the combustion pattern/process
 - HFO vs. Distillates
 - Heat content (BTU), pressure, and specific gravity
 - Low energy content unable to overcome freewheeling of propeller when going from dead slow ahead to dead slow astern
 - Variances with MDO/MGO and effect of heating (vapor lock, excessive leakage)
 - Cleansing properties of MDO/MGO releases built up particulates from the fuel lines clogging strainers and gumming up small moving parts in the fuel system.
 - Low Sulfur Fuels CARB requirement results in loss of lubricity
 - Mechanical Factors
 - MAN B&W System
 - Circulation of fuel to maintain viscosity heats the fuel, reducing viscosity causing internal pump leakage (common cause of LOP incidents)
 - Variable injection timing not functioning properly
 - Pre-set governor or fuel rack settings may not be adequate for lighter fuels
 - Low Speeds/RPM
 - LOP resulting from the way on the vessel or any wear on the fuel pump plunger not allowing sufficient pressure build up.
 - O-ring Failure
 - Accelerated chemical breakdown or embrittlement due to reaction to MDO/MGO or cooler operating temperatures
 - Operational Factors

- Crew competency operating on lighter fuels
- Real problem exists with the infrequent callers
- Management System not adequate
- Procedures unclear
- Solutions Discussed
 - Possible fix two separate piping systems
 - Not feasible for existing vessels
 - Not cost effective with slow economy
 - Test run engine on MDO/MGO well before entering port.
 - Purchase only high quality MDO/MGO
 - Operate from engine room (both engine side and from the engine control room) to allow engineers to make immediate adjustments to compensate for lighter fuel characteristics.
- Fuel Switching in the 11th District" by Mike Boyes, District 11
 - Following trends
 - Jump in incidents in 2009 when low sulfur fuel requirements came on line
 - ½ of the LOPS were fuel switching related in 2009. Reduced to ¼ in 2010.
 - Most incidents happened when maneuvering at slow speeds near final destination pier or anchorage.
 - LOP Incidents due to fuel switching are stabilizing to 2-4 per month (see included slide)
- Best Practices Discussion "What's working? What's Not?"
 - o What's Working?
 - Effective Management Systems
 - Crew familiarization
 - Developing methods based on previous processes
 - Shortening maintenance cycles: eliminate leaks, tight tolerances
 - Fuel cooler systems
 - Slow change over process
 - o What's Not?
 - Discussion with engine manufacturer and companies
 - Unwilling to divulge proprietary information
 - Will not develop new engines unless there are sufficient numbers of buyers.
 - Quality of the crew stemming from union halls (unfamiliar with specific vessels)
 - Pre-tests
 - Result in slower voyage
 - Captains will be forced to choose the longer, slower voyage on HFO or the shorter, riskier voyage on MDO/MGO

- Loss of Propulsion Incidents" by Brian Peter, American President Lines
 - Recap on previous numbers
 - Failure broken down into groups
 - Stalls, "flashing," clogged filters, loss of pressure, and miscellaneous
 - Percentages for each
 - Findings and Recommendations
 - Problems with thermal expansion
 - Larger sampling source is needed to get better results
 - Better investigations into causes
 - Run less on MDO/MGO when possible
- "ISO" by Thane Gilman
 - o Standard 13613
 - Maintenance plans for critical maneuvering systems
- > Final Thoughts
 - o The majority of LOPs occur while operating at slow speeds
 - o Engines being used today are not designed to run on light distillates.
 - Crew competency a major factor in successful operation on MDO/MGO
 - Operating on MDO/MGO increases risk of propulsion casualties

IV. Anchorages

- 1. The Vessel Traffic Service (VTS), working in conjunction with the SF Bar Pilots (SFBP) has developed a proposal designating berthing locations in anchorage 9 in south San Francisco Bay. This proposal is intended to provide more efficient and organized use of available anchorage space and leverage AIS technology to manage the anchoring of vessels.
- 2. The proposal creates twenty four anchor berths laid out in three north-south columns and eight east-west rows. At the center of each berth is a .1 nautical mile (200 yards) "drop bucket" inside which vessels are to drop anchor. The layout provides for .6 nautical miles (1200 yards) of north-south separation and .45 nautical miles (900 yards) of east-west separation between vessels, allowing more than sufficient room for vessels to swing with the current without colliding. The western-most column lies .25 nautical miles from the western anchorage boundary and the northern-most row lies .35 nautical miles from the northern anchorage boundary, also allowing vessels to swing with the current while remaining inside the anchorage.
- 3. This proposal was presented to the committee on March 10th, 2011 and a six month trial period began on March 14th. In the interim, the Vessel Traffic Service is working on management and compliance procedures. This proposal, if successful, will become a local anchoring protocol or best practice and final coordinates will be provided to NOAA's Coastal Survey for inclusion on future editions of nautical charts and amended language will be included in Coast Pilot 7.

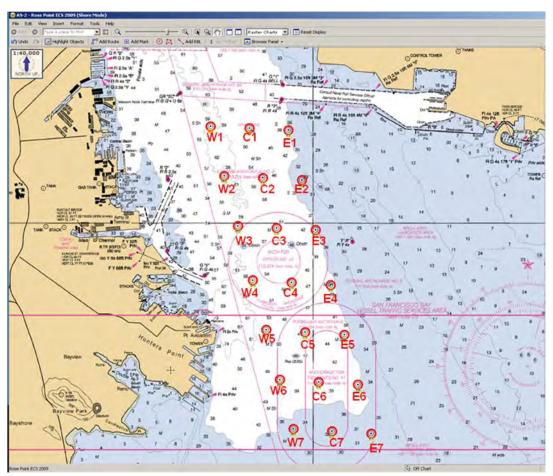


Figure 1. Anchorage 9 Berth Proposal

Harbor Safety Committee Of the San Francisco Bay Region

Report of the U.S. Army Corps of Engineers, San Francisco District May 12, 2011

1. CORPS FY 2010 O&M DREDGING PROGRAM

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

- a. Main Ship Channel (55+2) A condition survey is now completed.
- **b.** Richmond Outer Harbor (and Richmond Long Wharf) Dredging Richmond Outer Harbor will not be done until this summer due to funding issues. No change.
- **c. Richmond Inner Harbor** Dredging of the Inner Harbor is complete. No change.
- **d.** Oakland O & M Dredging There are no plans to dredge until this fall, if money is available. No change.
- e. Suisun Bay Channel (and New York Slough) Dredging is complete to the design depth of -35 (+2). Condition survey completed.
- **f.** Pinole Shoal (35+2) Dredging completed July 2. No Change.
- **g.** Redwood City/San Bruno Shoal Dredging of Redwood City is scheduled for this summer. San Bruno Shoal requires a condition survey; that survey has yet to be scheduled No change.

2. DEBRIS REMOVAL – The debris total for April 2011 was 112.5 tons: Raccoon - 65 tons; Dillard - 39 tons; Grizzly – 3.5 tons; misc. 5 tons.

BASEYARD DEBRIS COLLECTION TOTALS:

MONTH	GRIZZLY	RACCOON	DILLARD	MISC	TOTAL
2011	TONS	TONS	TONS	TONS	TONS
JAN	21	59	5	3	88
FEB	11	55	33.5	0	99.5
MAR	8.5	134	92.5	5	240
APR	3.5	65	39	5	112.5
MAY					0
JUN					0
JUL					0
AUG					0
SEP					0
OCT					0
NOV					0
DEC					0

YR TOTAL 540

3. UNDERWAY OR UPCOMING HARBOR IMPROVEMENTS

None to report.

4. EMERGENCY (URGENT & COMPELLING) DREDGING

The emergency dredging in Bullshead reach was completed on July 3, 2010.

5. OTHER WORK

a. **San Francisco Bay to Stockton** This project is on hold waiting for new funding. No change.

b. Sacramento River Deep Water Ship Channel Deepening The Corps is scheduled to start construction in June 2012. The Corps is actively coordinating with resource agencies and stakeholders to address comments to the DSEIR/EIS..

6. HYDROGRAPHIC SURVEY UPDATE

Address of Corps' web site for completed hydrographic surveys:

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

Main Ship Channel: Schedule completed May 2 has been posted.

Pinole Shoal: The condition survey of March 17-23 2011 has been posted. Suisun Bay Channel: Condition survey of April 2011 has been posted.

New York Slough: Condition survey of April 2011 has been posted.

Bull's Head Channel: March 10, 2001 condition survey has been posted.

Redwood City: Condition survey completed July 22-23, 2010 has been posted.

San Bruno Shoal: Surveys completed in June 22, 2010 have been posted.

Oakland Entrance Channel: Surveys completed in August and September 2009 have been posted. Oakland Inner Harbor Turning Basin:

Oakland Inner Harbor – Final Composite survey has been posted. The survey was done throughout March and compiled on March 30, 2011.

Oakland Outer Harbor:

Oakland Outer-Outer Harbor: The special Delta-Echo survey of May 5, 2010 has been posted. Oakland Inner Harbor - South Brooklyn Basin: November/December 2010 survey posted. Southampton Shoal and Richmond Long Wharf: Surveys of May 10-13, 2010 have been posted. Richmond Inner Harbor: A preliminary post-dredge survey completed in Dec 2010 and Jan 2011 has been posted.

North Ship Channel: Condition survey of June 2010 has been posted.

San Rafael Creek and San Rafael Across-the-Flats: Condition surveys completed Feb. 2011. Alameda Naval Station Survey (Alameda Point Navigation Chanel): Survey completed in April 2010 has been posted.

Disposal Site Condition Surveys:

SF-08 (Main Ship Channel Disposal Site): Survey completed in April 2011 has been posted.

SF-09 (Carquinez): October 5, 2010;

SF-10 (San Pablo Bay): July 2010 survey has been posted;

SF-11 (Alcatraz): Survey of May 4, has been posted (yesterday) -38.4.



Harbor Safety Committee of the San Francisco Bay Region Clearing House

c/o Marine Exchange of the San Francisco Bay Region 505 Beach Street, Suite 300 San Francisco, California 94133-1131 415-441-6600 fax 415-441-3080 hsc@sfmx.org

San Francisco Clearinghouse Report

May 12, 2011

- In April the clearinghouse did not contact OSPR regarding any possible escort violations.
- In April the clearinghouse did not receive any notifications of vessels arriving at the Pilot Station without escort paperwork.
- The Clearinghouse contacted OSPR 2 time in 2011 regarding possible escort violations. The Clearinghouse called OSPR 6 time in 2010, 8 time 2009; 4 times 2008; 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 April there were 93 tank vessels arrivals; 3 Chemical Tankers, 10 Chemical/Oil Tankers, 27 Crude Oil Tankers, 2 LPG's, 1 Non Specific Tanker, 19 Product Tankers, and 31 Tugs with Barges.
- In April there were 306 total arrivals.

San Francisco Bay Clearinghouse Report For April 2011

San Francisco Bay Region Totals

	2011		2010	
Tanker arrivals to San Francisco Bay	62		70	
Barge arrivals to San Francisco Bay	31		41	
Total Tanker and Barge Arrivals	93		111	
Tank ship movements & escorted barge movements	296		362	
Tank ship movements	182	61.49%	212	58.56%
Escorted tank ship movements	97	32.77%	92	25.41%
Unescorted tank ship movements	85	28.72%	120	33.15%
Tank barge movements	114	38.51%	150	41.44%
Escorted tank barge movements	41	13.85%	71	19.61%
Unescorted tank barge movements	73	24.66%	79	21.82%

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

Escorts reported to OSPR

0

Movements by Zone	Zone 1	%	Zone 2	%	Zone 4	%	Zone 6	%	Total	%
Total movements	188		291		0		117		596	
Unescorted movements	128	68.09%	182	62.54%	0	0.00%	63	53.85%	373	62.58%
Tank ships	79	42.02%	97	33.33%	0	0.00%	33	28.21%	209	35.07%
Tank barges	49	26.06%	85	29.21%	0	0.00%	30	25.64%	164	27.52%
Escorted movements	60	31.91%	109	37.46%	0	0.00%	54	46.15%	223	37.42%
Tank ships	19	10.11%	39	13.40%	0	0.00%	18	15.38%	76	12.75%
Tank barges	41	21.81%	70	24.05%	0	0.00%	36	30.77%	147	24.66%

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 2011

San Francisco Bay Region Totals

	2011		2010	
Tanker arrivals to San Francisco Bay	243		699	
Barge arrivals to San Francisco Bay	112		371	
Total Tanker and Barge Arrivals	355		1,070	
Tank ship movements & escorted barge movements	1,181		3,528	
Tank ship movements	734	62.15%	2,070	58.67%
Escorted tank ship movements	362	30.65%	925	26.22%
Unescorted tank ship movements	372	31.50%	1,145	32.45%
Tank barge movements	447	37.85%	1,458	41.33%
Escorted tank barge movements	173	14.65%	683	19.36%
Unescorted tank barge movements	274	23.20%	775	21.97%

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

Escorts reported to OSPR

2

Movements by Zone	Zone 1	%	Zone 2	%	Zone 4	%	Zone 6	%	Total	%
Total movements	707		1,137		0		482		2,326	
Unescorted movements	486	68.74%	723	63.59%	0	0.00%	262	54.36%	1,471	63.24%
Tank ships	276	39.04%	356	31.31%	0	0.00%	134	27.80%	766	32.93%
Tank barges	210	29.70%	367	32.28%	0	0.00%	128	26.56%	705	30.31%
Escorted movements	221	31.26%	414	36.41%	0	0.00%	220	45.64%	855	36.76%
Tank ships	87	12.31%	155	13.63%	0	0.00%	92	19.09%	334	14.36%
Tank barges	134	18.95%	259	22.78%	0	0.00%	128	26.56%	521	22.40%

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.



CALIFORNIA STATE LANDS COMMISSION

HARBOR SAFETY COMMITTEE MONTHLY REPORT - APRIL COMPARISON

VESSEL TRANSFERS

	Total Transfers	Total Vessel Monitors	Total Transfer Percentage	
APRIL 1 - 30, 2010	223	112	50.22	
APRIL 1 - 30, 2011	202	90	44.55	

CRUDE OIL / PRODUCT TOTALS

	Crude Oil (D)	Crude Oil (L)	Overall Product (D)	Overall Product (L)	GRAND TOTAL
APRIL 1 - 30, 2010	13,916,200	0	18,757,821	8,422,190	27,180,011
APRIL 1 - 30, 2011	13,973,400	80,000	17,840,055	8,491,884	26,331,939

OIL SPILL TOTAL

APRIL 1 - 30, 2010	Terminal	Vessel	Facility	Total	Gallons Spilled
	0	0	0	0	0
APRIL 1 - 30, 2011	0	0	0	0	0

^{***} 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.

Harbor Safety Committee-San Francisco Bay Region ARB OGV Clean Fuel Rule Update



San Francisco, California May 12, 2011

California Environmental Protection Agency



ARB OGV Clean Fuel Rule Essential Modifications Exemption Applications Summary*

Vessel Applications	No. of Vessels
Total Applications	475
Applications Completed	439
Approved	381
Partially Approved	58**
No Longer Active***	33
Pending/Under Review	2

^{*} Summary from July 1, 2009 to April 30, 2011.

^{**} Includes denial of 58 main engine requests and 8 auxiliary engine requests and approval of all accompanying auxiliary boiler requests.

^{***} ARB is awaiting further information or applicant is no longer pursuing exemption.

ARB OGV Clean Fuel Rule Use of Safety Exemptions*

Use of the Safety Exemption				
July – December 2009	11			
Jan – December 2010	29			
January 2011	1			
February 2011	2			
March 2011	4			
April 2011	0			
Use of the Noncompliance Fee Provision				
Total July 2009 - April 30, 2011	5			

ARB OGV Clean Fuel Rule Amendments

- Two workshops held in Long Beach and Sacramento
 - See http://www.arb.ca.gov/ports/marinevess/marinevess.htm
- Hearing on proposed amendments scheduled for June 23-24 Board meeting
- Formal public comment period began on May 9, 2011
 - Hearing notice and staff report for rule amendments available at: http://www.arb.ca.gov/regact/2011/ogv11/ogv11.htm

Proposed Amendments

- Extension of "Regulated California Waters" in Southern California
- Revise implementation date of Phase 2 (0.1% sulfur) fuel from 2012 to 2014
- Changes to Noncompliance Fee Provision
 - Fee halved when vessel purchases and uses compliant fuel during noncompliant California port visit
 - Fee for second noncompliant port visit proposed to be reduced from \$91,000 to \$45,500 (same as for first port visit)
 - Anchorage conducted in conjunction with a port visit not counted as a second port visit

Proposed Revised Boundary



ARB OGV Clean Fuel Rule Contact Information

Bonnie Soriano (Lead Staff) (916) 327-6888 bsoriano@arb.ca.gov Peggy Taricco (Manager) (916) 323-4882 ptaricco@arb.ca.gov

Paul Milkey (Staff) (916) 327-2957 pmilkey@arb.ca.gov Dan Donohoue (Branch Chief) (916) 322-6023 ddonohou@arb.ca.gov Tug Workgroup Meeting Notes May 5, 2011 1000 hrs State Lands Commission Hercules, Ca

Attendees: Matthew Peake (Conoco Phillips), John Berge (PMSA), Kaitlin Ortega (SFMX), Jonathan Mendes (Starlight Marine), Joan Lundstrom (Chair Harbor Safety Committee), Gary Toledo (Toledo Marine Consulting), Jeff Cowan (OSPR), Walt Partika (Foss), John Schneider (Tesoro), Scott Pease (Transmarine), Linda Scourtis (BCDC), Deb Self (SF Bay Keeper), Robert Gregory (Foss), Mike Foil (State Lands), Milt Merritt (Am Nav)

Meeting Agenda with notes bullet pointed.

- 1. Opening Remarks; Jonathan Mendes
- 2. Discuss Best Practices for Bunker Transfers on SF Bay and Tributaries
 - a. Review LA/LB's Progress from the 4/27 meeting
 - LA/LB discussed and agreed that the importance of having a Statewide BMP for Bunkering with regional addendums is definitely the way in which we want to move.
 - We discussed this in further detail and identified that all Ports of California need to contribute to the Statewide BMP Regional Addendums as they see fit. San Diego being the only other port to receive Bunkers from a barge.
 - In reference to LA/LB's Notes Captain John Schneider provided our group with a copy of
 the content which WA DOE has in their Packet which is distributed to the Stakeholders.
 We agreed this is something we would want the State of California to also provide,
 however we see it being distributed ion an electronic format in interests of
 environmental and economic concerns.
 - The LA/LB Workgroup met and was able to view Washington State's Bunkering Best Practices Video. Group was in agreement with SF's synopsis from our April meeting which identified the Video as a very effective tool for training.
 - b. Review New Proposed Draft of BMP for Bunkering. (Open Discussion)
 - Question was raised regarding the person on the bunkering team who is responsible for sounding tanks aboard the ship during bunkering ops and whether or not there was one person assigned to each tank. We explained that there is always an individual assigned to sound, and they sound both active and inactive tanks to ensure that there are no tanks being inadvertently overfilled. It was also explained that there are overfill tanks and alarms which are meant as a back up to the person sounding all tanks during bunkering operations.
 - Pre transfer conference: It was discussed again in further detail the importance of face to face transfers. It has also been concluded that there needs to be measures to mitigate the occurrence of there not being "Safe Access" under normal operating conditions.
 - It was again stressed that the message of "when in doubt, shut it down" must be repeatedly portrayed in the BMP's and the training literature.

- It was concluded that we should stress the consequences of not following CFR and BMP's. We will be approaching the Coast Guard to assist in drafting the consequence literature.
- It was discussed that the Marine Exchange of both Ports would be a great platform for accessing documentation as well as other documentation and control roles set forth throughout this BMP Process.
- The working group will work together to revise the latest Draft of the BMP for the next Tug Workgroup Meeting for further discussion.
- All attendees were asked to send any further comments, or suggested additions or revisions to the latest draft of the BMP's to the Chair of the Workgroup at <u>jmendes@harleymarine.com</u> before the June 7th meeting.
- c. Discuss the Bunkering Video Options, Applicability and whether or not we want to pursue.
 - Both SF and LA working groups have confirmed that the video is the best platform for developing and providing a set of standards as well as training material to the industry in efforts of reducing the risk of Spills during bunkering operations. Clarification was made to video licensing and distribution. The option we all agreed best to suit our sensitive timeline and economical needs is option #2 underlined below;
 - *Option #1 *MTS sells the State of California a license to distribute (but not resell) the existing training video "as-is". MTS would provide the State with 200 DVDs and replenish their stock as needed provided the customer pays for the cost of materials and shipping. Cost: \$7,500
 - *Option #2* Same details as above but MTS makes some basic video updates and custom labeling to the program (for example: swap out screens with
 "Washington State DOE" and replace with "California Office of Spill Prevention and Response") We would update some of the graphics to give it a more modern feel. Cost: \$9,500
 - *Option #3* Same details as above but MTS makes some significant visual updates to the program (we would travel and film in LA/SF a bunkering procedure, interview new Subject Matter experts, detail any new regulations or changes etc.)Cost: \$13,500
 - *Option #4 *MTS produces an brand new custom Bunkering Operations film Cost: \$30,000
 - It was voted at this working group that the Administrator of OSPR work to provide funding for converting the existing DOE Video to CA Specific Standards as outlined in option 2 above allowing for the video to be exclusively specific to bunker operations conducted in CA Waters. All attendees were in favor.
 - The Chair of the Workgroup will draft the letter to the Administrator for a May 12, 2011 vote.
- 3. Old Business
- 4. New Business
- 5. Public Comment
 - a. May 12, 2011 May Day Party reminder from Kaitlin Ortega.
 - b. Next Work Group Meeting will be on June 7, 2011 at State Lands Commission in Hercules. 1000 hrs.
- 6. Adjourn

FROM: Chair; SF Bay Harbor Safety Committee; Tug Workgroup

To: San Francisco Harbor Safety Committee

SUBJECT: Request to the Administrator; OSPR for funding of the Best Management Practices Video

Project

DATE: May 12, 2011

Background

At the February 2011 Full Harbor Safety Committee Meeting the Tug Workgroup was tasked by the HSC Chair to begin working to develop Best Management Practices for Bunker Operations on San Francisco Bay. Since then, both San Francisco and LA/LB workgroups have been working together through this process in order to deliver a California Specific BMP in efforts to further prevent the spill of bunker fuel to California waters.

To date we have reviewed many aspects, regulations, procedures, challenges and literature we discovered and mutually agreed that there are already various tools in place. Both Workgroups have met multiple times and have been able to have strong participation from various stakeholders whom are directly related to bunker transfers and operations. All have agreed that we do have tools in place within our reach, and we should focus on ways in which we can adapt them to operations within our state waters.

A significant resource which we have reviewed in full and discussed at length is the existing Washington State DOE; Best Practices for Bunkering Training Video that is currently in circulation. In its current format, this video has been identified to cover all key points to a Bunker Transfer which we agree should be included in the pretransfer training for all bunker operations. We have concluded that the existing video along with some minor editing as well as making the video specific to California would prove to be a prudent training platform prior to bunker transfers from barges to ships in California State Waters. It was further discussed and agreed that if this tool had been utilized and contents practiced, the 2 most recent spills which occurred in California waters may not have occurred.

After researching options; it has been communicated that there is an affordable revision option available. On May 5, 2011 the Tug Work Group voted to recommend to the Harbor Safety Committee (HSC) that the Committee request the OSPR Administrator to provide funding for converting the existing Washington State DOE Video for Best Bunkering Practices to California Specific Standards by making some basic video updates, custom labeling, and graphics so that the video can be exclusively specific to bunker operations conducted in all California waters. The estimated cost was \$9,500. All present approved. This will be voted upon by the HSC at the May 12, 2011 meeting.

Stressing the collaborative input from industry that this video is a strong platform for training, as well as the confidence that the video can be circulated to all stakeholders effectively, I only see this project being well worth the investment. On behalf of the Tug Workgroup, I appreciate your attention to this matter.

Sincerely,

Captain Jonathan Mendes Chair; Tug Workgroup San Francisco Bay Harbor Safety Committee