

Mandated by the California Oil Spill Prevention and Response Act of 1990 Harbor Safety Committee of the San Francisco Bay Region Thursday, January 13, 2011 Harbormaster's Office, Port of Richmond, Richmond, California

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

Committee members (M) and alternates (A) in attendance with a vote: Capt. Marc Bayer (M), Tesoro Refining & Marketing Company; John Berge (M), Pacific Merchant Shipping Association; Margot Brown (M), National Boating Federation; Ron Chamberlain (M), Port of Benicia; Aaron Golbus (M); Port of San Francisco; Capt. Bruce Horton (A), San Francisco Bar Pilots (Bar Pilots); Capt. Jonathon Mendes (M), Starlight Marine Services; Capt. Pat Murphy (M), Blue & Gold Fleet; William Nickson (A), Transmarine Navigation; Capt. Eric Osen (M), Chevron Shipping; Walt Partika (A), Foss Maritime; Chris Peterson (M), Port of Oakland; Capt. Ray Shipway (A), International Organization of Masters, Mates & Pilots, Capt. Cynthia L. Stowe, United States Coast Guard (USCG); Maj. Samuel L. Volkman, United States Army Corps of Engineers (USACE); Gerry Wheaton, National Oceanographic and Atmospheric Administration (NOAA); Michael Williams (M), Port of Richmond.

Alternates present, and those reporting to the HSC on agenda items: Capt. Esam Amso (A), Valero Marketing and Supply Company; Bob Chedsey, California State Lands Commission (State Lands); Mike Coyne, California Office of Spill Prevention and Response (OSPR), Tom Evans, NOAA; Capt. Noapose Fotu (A), National Cargo Bureau; Capt. Jack Going (A); Baydelta Maritime; Lt. Cmdr. DesaRae Janzen, USCG; Sean Kelley, USCG; Rob Lawrence, USACE; Paul Milkey, California Air Resources Board (ARB). Linda Scourtis (A), BCDC,

The meetings are always open to the public.

Approval of the Minutes

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

Comments by the Chair – Lundstrom

• Lundstrom had met with Capt. Stowe to offer the services of the HSC as a forum to discuss safe operations of the America's Cup races scheduled for San Francisco Bay. The HSC is uniquely positioned as a state-created committee made up of diverse and active representatives of the maritime community as official members of the HSC and in attendance at the public meetings. A new presentation from the office of the Mayor of San Francisco would be scheduled as soon as possible.



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

- The official web site for the America's Cup Race is: http://www.americascup.com. The website for the city of San Francisco is http://www.oewd.org/Development_Projects-Americas_Cup.aspx.
- A Certificate of Appreciation was presented to Capt. Bayer to mark the end of his term on the HSC. Capt. Bayer had been an active member for many years representing Tanker or Marine Terminal Operators. The certificate cited Capt. Bayer's leadership as chair of the Physical Oceanographic Real Time System (PORTS) Work Group and founder of the Dredge Issues Work Group that led to the North Bay Channel realignment project. Capt. Bayer thanked the HSC and said that he looked forward to attending future meetings as an interested member of the public.

Coast Guard Report - Capt. Stowe

- Capt. Stowe had had lengthy discussion about the America's Cup Race with representatives of the Port of San Francisco, the Mayor's Office, and on Wednesday January 12, with America's Cup Race Management (ACRM). It was her sense that all parties were keenly aware of the need to manage spectators and avoid disruptions to commerce.
- The race course had not been determined, but soon would be. Nine to twelve days of racing would be scheduled for 2012 and twenty to forty days of racing in 2013. Preliminary air and maritime management plans were due in March 2011. The people management plan was also due in March, with the security plan to follow a little later.
- Capt. Stowe agreed that the HSC was an excellent forum to hear concerns about the races. A task force under the command of Capt. Jay Jewess, USCG, had been stood up to handle planning for the event. Lt. Cmdr. Janzen had been designated as liaison to the city of San Francisco and ACRM. Lt. Cmdr. Ken Kostecki, USCG, had been designated as liaison to the maritime community. Those with concerns were encouraged to contact him so that they could be brought to the HSC. Lt. Cmdr. Kostecki is Chief of the Inspections Division, Sector San Francisco, and can be reached at (510) 437-2787 or at Kenneth.S.Kostecki@uscg.mil.
- **Cmdr. Darren Drury**, was scheduled to coordinate a meeting with industry to discuss the December spike in the number of propulsion failures.
- Lt. Cmdr Janzen read from two reports that are attached to these minutes.

Lundstrom asked how many of the December losses of propulsion could be attributed to fuel switching problems. **Mike Wood**, USCG, said that only one out of seven could be attributed to fuel switching.

Berge asked whether there would be windows during the America's Cup Races during which commercial vessels would be unable to transit the Bay. **Capt. Stowe** said that it was too early to answer that question, but noted that the Bay was already home to numerous regattas that never affected traffic. She said that **Berge's** concern would be passed on to ACRM.

Berge suggested that the Navigation Work Group coordinate the HSC's activity around the America's Cup. **Lundstrom** suggested that options be kept open for now since the Cup represented a major challenge that might impact several of the work groups.



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

US Army Corp of Engineers Report - Maj. Volkman

• Thanked everyone for their reports and cooperation in debris removal as a result of December's heavy rains.

• USACE was ready, willing, and able to assist with the America's Cup races.

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

Capt. Horton asked about the schedule for Oakland dredging. **Lawrence** said he would get back to **Capt. Horton. Peterson** asked **Lawrence** to check whether a "speed bump" had developed in the Oakland Channel. **Lawrence** said that he would.

Capt. Horton asked why there had been a three month delay in posting the pre-dredge surveys for Suisun Bay. He said that the turn around needed to be much faster for that part of the Bay Area. **Lawrence** said that he would report back.

Clearing House Report – Steinbrugge

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

OSPR Report - Coyne

- The creation of new OSPR letterhead as a result of changes brought about by the November elections was delaying the appointment of new members to the HSC since the process required that a lot of letters be sent.
- **Scott Schaefer** was the Acting Administrator for OSPR. He is a veteran of the Coast Guard and has a long association with OSPR.
- A workshop to discuss bunker procedures at anchor was scheduled for January 27.

NOAA Report - Wheaton

- Coast Pilot 7 was scheduled to be released in January 2011 and he had fielded a couple of questions about best practices as a result. The Coast Guard had asked when the best practices created by the California HSC's would be included in the publication, and the Los Angeles/Long Beach HSC had asked when the best practices would appear in the Sailing Directions publications of the British Admiralty.

 Wheaton said that both publications were open to including best practices but the HSC's must decide for them selves what they want to see in those publications and specify the content to the publishers.
- Requested that NOAA be kept informed as race dates formalized for the America's Cup, since accurate charts would be very important.
- Introduced Evans.



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

Briefing: Tsunami Threats to San Francisco Bay Region; Tsunami Warning System Discussion – Evans, NOAA Warning Coordination Meteorologist.

- There had been no volunteers to participate in the fog study that the HSC was briefed on at its November 2010 meeting. Those interested in participating were invited to send an email to tom.evans@noaa.gov.
- Evans gave a Power Point presentation on the Tsunami warning system that is attached to these minutes. In addition, he provided the following web links:
- For tsunami inundation maps of the Bay Area, check the menu at http://weater.gov/SanFrancisco
- To sign up for the Tsunami Bulletin e-mail list, go to http://wcatwc.arh.noaa.gov/watcher/tsunamiwatcher.php
- The home page for the West Coast and Alaska Tsunami Warning Center is http://wcatwc.arh.noaa.gov. Evans stressed during his presentation that residents of the West Coast should not rely on information generated by the Hawaii Tsunami Warning Center.
- For a study of the possible effects of a Tsunami on Bay Area marine oil terminals go to: http://www.slc.ca.gov/Division_Pages/MFD/MOTEMS/STUDIES/PART%20q3%20%20Numerical%Modeling.pdf.
- The tsunami page of the California Emergency Management page is at http://www.oes.ca.gov/WebPage/oeswebsite.nsf/Content/B1EC51BA215931768825741F005E8D80?OpenDocument. The tsunami page of the California Geological Survey can be found at www.tsunami.ca.gov.

Capt. Going asked about the magnitude of the quakes used for the studies and how they scaled. **Evans** said that the type of quake had more of an impact that the magnitude alone.

Peterson asked about the effects of the receding wave of a tsunami. Evans said that the importance of that effect was just now being understood and that studies had only begun. **Capt. Jay Jewess**, USCG, **Evans** replied that was in the works, they are aware of the serious problems it can cause for large vessels. Tsunami research is in its infancy and they were only now beginning to think of issues like ships bouncing off the bottom if the tsunami coincided with a low tide.

Capt. Pete Bonebakker, ConocoPhillips asked how people could be alerted if they didn't have VHF and couldn't make a phone call. **Capt. Bayer** seconded the need for a passive notification system. **Capt. Stowe** said that the Coast Guard could work on that. **Capt. Korwatch** suggested that the notification system could work like the notification system for changes in MARSEC levels.

State Lands Report - Chedsey

- New commissioners were in place but a new Executive Officer had not been appointed.
- They will hold a customer service meeting March 30, 2011 at the Shell, Martinez Club House. Topics to discuss will include staff changes and funding realities caused by the California State Budget.
- **Chedsey** then read a report from a report that is attached to these minutes.



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

Berge asked if Chedsey could provide yearly numbers for his report and Chedsey said that he would.

Air Resources Board (ARB) Report - Milkey

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

Wheaton asked what the purpose of the non-compliance fee was. **Milkey** said that it was to make sure that there was no economic advantage for avoiding compliance.

Berge asked how bio-fuels were worked into the ARB regulations. **Milkey** said that DMA or DME specifications are used.

Nickson asked for clarification on the port call fee for non-compliance. **Milkey** said that there would generally be a port call fee in the example provided by **Nickson** where a ship was moving from Rodeo to Benicia. **Capt. Bayer** said that it was his experience that ARB had been reasonable to work with. **Milkey** said that it was always advisable to call ARB since there are some exceptions in the process.

Tug Work Group - Capt. Mendes

• They had scheduled another meeting to discuss bitt strength on February 8, 2011. He encouraged stakeholders to attend and provide input.

Navigation Work Group - Capt. Horton

There was nothing to report.

Ferry Operation Work Group - Capt. Murphy

Their next meeting was scheduled for February 2, 2011.

Dredge Issues Work Group - Capt. Bayer

There was nothing to report

Prevention through People Work Group - Brown

- The *Share the Bay* video is out and available on DVD. There are lots of copies available so please take as many as you need to distribute.
- **Brown** said that it was her expectation that the greatest problem around the America's Cup races would be from the spectator fleet. **Berge** asked whether this would be due to people coming in from around the world. **Brown** said that the larger yachts likely to attend would be much less of a problem than the fact that anyone with a boat in the region that had never been on the Bay could show up. **Capt.**



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

Stowe said that the Coast Guard is very interested in ways to build safety education into the planning for the event.

Physical Oceanographic Real Time System (PORTS) Work Group - Capt. Amso

Capt. Amso read from a report that is attached to these minutes.

Capt. Korwatch said that OSPR had requested that funds for an air-gap sensor be removed from the maintenance contract budget that the Exchange would submit to OSPR, and that the Exchange had complied. **Golbus** asked why the air gap sensor system was so expensive and complex when there are available tide gauges and the height of the bridge is known. **Capt. Korwatch** said that is was difficult to see a small wooden board with numbers attached to a bridge footing from the bridge of most modern vessels. By the time it was visible, it could easily be too late. **Steinbrugge** added that the height of the bridge is not constant and varies with temperature, load, and wind. A microwave air-gap sensor could measure the distance every six minutes.

PORTS Report - Steinbrugge

- The sensor on the buoy at the Oakland bar channel had been pulled for maintenance since the Coast Guard had scheduled work on the buoy.
- Problems with the wind sensor at the Union Pacific railroad drawbridge were scheduled for repair in the third week of January.
- The new wind sensor at Point Potrero was scheduled to come online in the third week of January. Sensors at Oakland, Rodeo, and Pittsburg were scheduled for installation in February 2011. The wind sensor at Pier 1 San Francisco was scheduled for the spring with the Pier 27 sensor to follow later. The AMORCO tide station was looking like an installation in August or September with Avon current sensor possibly a little sooner.

Golbus said that the installation at Pier 27 could be complicated by the location of America's Cup facilities.

Public Comment

Capt. Korwatch announced a briefing on Port Security Grant funding for the January meeting of the Area Maritime Security Committee.

New Business		
There was none.		
Old Business		
Maritime Security Committee.		

There was none.



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, February 10, 2011 at the Pier 1 Conference Center, Port of San Francisco.

Adjournment

A motion for adjournment was made and seconded. It passed without discussion or dissent.

Lundstrom adjourned the meeting at 1200.

espectfully submitted:

t. Lynn Korwatch

Harbor Safety Committee of the SF Bay Region January 13, 2011 Page 7

PREVENTION / RESPONSE - SAN FRANCISCO HARBOR SAFETY STATISTICS						
November-10						
PORT SAFETY CATEGORIES						
1. Total Number of Port State Control Detentions for period:	0					
SOLAS (0), MARPOL (0), ISM (0), ISPS (0)						
2. Total Number of COTP Orders for the period:	1					
Navigation Safety (1), Port Safety & Security (0), ANOA (0)						
3. Marine Casualties (reportable CG 2692) within SF Bay: Allision (0), Collision (0), Fire (0), Grounding (0),	2					
Sinking (0), Steering (0), Propulsion (1), Personnel (1), Other (0), Power (0)						
4. Total Number of (routine) Navigation Safety related issues / Letters of Deviation: Radar (2), Gyro (0),	4					
Steering (0), Echo sounder (0), AIS (2), AIS-835 (0), ARPA (0), SPD LOG (0), R.C. (0), Other (0)	1					
5. Reported or Verified "Rule 9" or other Navigational Rule Violations within SF Bay:	0					
6. Significant Waterway events or Navigation related cases for the period:	0					
7. Maritime Safety Information Bulletins (MSIBs): None	0					
Total Port Safety (PS) Cases opened for the period:	7					
MARINE POLLUTION RESPONSE						
* Source Identification (Discharges):						
TOTAL VESSELS	3					
U.S. Commercial Vessels	1					
Foreign Freight Vessels	1					
Public Vessels	0					
Commercial Fishing Vessels	0					
Recreational Vessels	1					
TOTAL FACILITIES Regulated Waterfront Facilities	0					
Regulated Waterfront Facilities - Fuel Transfer	0					
Other Land Sources	0					
Mystery Spills - Unknown Sources	3					
Total Oil/Hazmat Pollution Incidents within San Francisco Bay for Period	6					
1. Spills < 10 gallons	6					
2. Spills 10 - 100 gallons	0					
3. Spills 100 - 1000 gallons	0					
4. Spills > 1000 gallons	0					
5. Spills - Unknown	0					
TOTAL OIL DISCHARGE AND HAZARDOUS MATERIALS RELEASE VOLUMES BY SPILL SIZE CATEGORY:	6					
Estimated spill amount from U.S. Commercial Vessels:	2					
2. Estimated spill amount from Foreign Freight Vessels:	1					
2. Estimated spill amount from Public Vessels:	0					
3. Estimated spill amount from Commercial Fishing Vessels:	0					
4. Estimated spill amount from Recreational Vessels:	0.5					
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:	0					
8. Estimated spill amount from Unknown sources:	3					
TOTAL OIL DISCHARGE AND/OR HAZARDOUS MATERIAL RELEASE VOLUMES (GALLONS):	6.5					
Civil Penalty Cases for Period	0					
Notice of Violations (TKs)	1					
Letters of Warning	2					
TOTAL PENALTY ACTIONS:	3					

SIGNIFICANT PORT SAFETY AND SECURITY CASES (November 2010)

MARINE CASUALTIES - PROPULSION/STEERING

Loss of propulsion, M/V ORIENT PHOENIX (1 Nov): During inbound SF transit, the vessel failed to start in response to astern order while attempting to maneuver into Anchorage 9. Vessel safely dropped anchor. Attending technician stated LOP was caused by fuel pump leak and loss of fuel pressure due to use of low sulfer diesel. Vsl took CARB safety exemption and safely transited with a one tug escort from Anchorage 9 to Stockton. Case Pends.

Crew member injury, M/V MOKIHANA, (15 November): The master of the US-flagged M/V MOKIHANA reported that the ship's electrician injured his left knee and right arm while descending from the C deck to the B deck using the external accommodation ladder on the portside of the vessel while enroute to commence emergency training evolutions. The injuries sustained were reported to be non-life threatening, yet rendered him to be unfit to perform his routine duties. On 18 November, the investigation team visited the vessel to collect evidence. The injured party was taken to a local hospital. Case Pends.

VESSEL SAFETY CONDITIONS

None

GENERAL SAFETY/SECURITY CASES

None

NAVIGATIONAL SAFETY

Letter of Deviation (LOD) Automatic Identification System (AIS), M/V APL OREGON (8 Nov): The vsl was issued an outbound LOD

Letter of Deviation (LOD) Radar, M/V OVERSEAS REYMAR (28 Nov) The vsl was issued an outbound LOD, repairs to be completed in Long Beach, CA.

Letter of Deviation (LOD) Automatic Identification System (AIS), M/V ANNABELLE SCHULTE (30 Nov) The vsl was issued an inbound LOD, repairs made prior to departure.

Letter of Deviation (LOD) Radar, M/V HUMBOLDT EXPRESS (30 Nov): The vsl was issued an inbound and outbound LOD.

SIGNIFICANT INCIDENT MANAGEMENT DIVISION CASES

onboard the barge due to equipment failure. The potential for the spill was 2 gallons, a NOV (notice of violation) was issued.

06 November: Barge MOKU PAHU (foreign freight) discharged approximately 1 gallon of diesel from a hairline fracture in their starboard fuel tank. The potential onboard was 126,798 gallons. The crew pumped the fuel into another tank so that the level was below the breech, thus eliminating further discharge. The vessel had no prior history, so an LOW (letter of warning) was issued.

PREVENTION / RESPONSE - SAN FRANCISCO HARBOR SAFETY STATISTICS						
December-10						
PORT SAFETY CATEGORIES						
1. Total Number of Port State Control Detentions for period:	0					
SOLAS (0), MARPOL (0), ISM (0), ISPS (0)						
2. Total Number of COTP Orders for the period:	6					
Navigation Safety (5), Port Safety & Security (1), ANOA (0)						
3. Marine Casualties (reportable CG 2692) within SF Bay: Allision (0), Collision (0), Fire (0), Grounding (0),	10					
Sinking (0), Steering (1), Propulsion (8), Personnel (0), Other (1), Power (0)						
4. Total Number of (routine) Navigation Safety related issues / Letters of Deviation: Radar (1), Gyro (0),	2					
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:	0					
6. Significant Waterway events or Navigation related cases for the period: None	0					
7. Maritime Safety Information Bulletins (MSIBs): Pollution Prevention Regulations 10-06	1					
Total Port Safety (PS) Cases opened for the period:	19					
MARINE POLLUTION RESPONSE						
* Source Identification (Discharges):						
TOTAL VESSELS	1					
U.S. Commercial Vessels	0					
Foreign Freight Vessels	0					
Public Vessels	1					
Commercial Fishing Vessels	0					
Recreational Vessels	0					
TOTAL FACILITIES	0					
Regulated Waterfront Facilities Regulated Waterfront Facilities - Fuel Transfer	0					
Other Land Sources	0					
Mystery Spills - Unknown Sources	0					
Total Oil/Hazmat Pollution Incidents within San Francisco Bay for Period	2					
1. Spills < 10 gallons	2					
2. Spills 10 - 100 gallons	0					
3. Spills 100 - 1000 gallons	0					
4. Spills > 1000 gallons	0					
5. Spills - Unknown	0					
TOTAL OIL DISCHARGE AND HAZARDOUS MATERIALS RELEASE VOLUMES BY SPILL SIZE CATEGORY:	2					
1. Estimated spill amount from U.S. Commercial Vessels:	0					
Estimated spill amount from Foreign Freight Vessels:	0					
2. Estimated spill amount from Public Vessels:	0.3					
3. Estimated spill amount from Commercial Fishing Vessels:	0					
4. Estimated spill amount from Recreational Vessels:	0					
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:	0					
8. Estimated spill amount from Unknown sources:	0.02					
TOTAL OIL DISCHARGE AND/OR HAZARDOUS MATERIAL RELEASE VOLUMES (GALLONS):	0.32					
Civil Penalty Cases for Period	0					
Notice of Violations (TKs)	0					
Letters of Warning	0					
TOTAL PENALTY ACTIONS:	0					
IOIALI LIIALII ACIIOIII.						

SIGNIFICANT PORT SAFETY AND SECURITY CASES (December 2010)

MARINE CASUALTIES - PROPULSION/STEERING

Loss of propulsion, M/V CMA CGM HUGO, (10 December): The vessel lost propulsion while in the Oakland turning basin. The cause of engine failure was a loose flange in the control air line. The flange was identified by the crew and repairs were made. Case Pends.

Loss of propulsion, M/V MOL PROMISE (12 Dec): The vessel was transiting outbound from Oakland berth when it had a loss of RPM with 2 tugs aside. Main engine failure was caused by a ball connection to the fuel linkage that was broken. Case Pends.

Loss of propulsion, M/V CSAV PANAMBY, (16 December): The main engine failed to give full power when ordered from the bridge during inbound transit through SF Bay. This was caused by failure of one (of two) auxiliary blower that had an electrical overload. The Main Engine stopped on its own when the Bridge ordered "Dead Slow". Identified loose electrical connections to blower motor controllers. Connections tightened and tested satisfactorily. Case Pends.

Loss of propulsion, T/V FLORIDA VOYAGER, (17 December): Failed to start with astern propulsion while attempting to drop anchor in Anchorage 9. No damage to equipment or engine occurred. Failure due to fuel switching and fuel pump rack was adjusted to compensate for running low sulfur diesel. Case Pends.

Loss of steering, M/V ZELINSKY, (20 December): The Ferry experienced intermittent steering issues and returned to Tiburon Ferry Terminal to drop off passengers. Steering problems due to water leaking into bridge wing control station. Station dried and leak sealed. Case Pends.

Loss of propulsion, T/V CHAMPION PIONEER, (23 December): Vessel experienced low pressure air during engine start while attempting to get underway from Anchorage 9. Cause of M/E failure was due to a faulty check valve in the starting air compressor. Case Pends

Loss of propulsion, M/V MARIN, (24 December): The Golden Gate Ferry lost propulsion in the vicinity of the Larkspur Ferry terminal with passengers on board. The starboard main diesel engine shut down while maneuvering. The vessel returned to the terminal on a single engine and disembarked all passengers. The engine stopped for lack of fuel due to air in the fuel supply line. The mechanics identified and tightened loose connections and purged the fuel system. Engine tested satisfactorily. Case Pends.

Equipment failure, T/V EVERGREEN STATE (26 December): lost pilot house control of the main propulsion system while inbound from sea to the pilot station. Control was regained within minutes, vessel safely maneuvered to Anchorage 9 where it stayed until repairs were verified. Engine control system was adjusted and tested satisfactorily. Case Pends.

Loss of propulsion, M/V NASSAU PRIDE, (27 December): loss of propulsion occurred while mooring in Port of Redwood City. Vessel's Master was directed to remain in berth until the causative factors could be determined and repairs made. Failure was attributed to a dirty air solenoid valve. Solenoid valve was cleaned, then re-installed and main engine was tested satisfactory. Case Pends.

Loss of propulsion, M/V CAP TAPAGA (28 Dec): loss of propulsion occurred while transiting outbound from Port of Oakland. It was determined that a main engine bypass valve was left open causing fuel starvation at power. The valve was opened by the Chief Engineer to depressurize the fuel system while changing out another valve and was not closed after repairs were completed. Case Pends.

VESSEL SAFETY CONDITIONS

None

GENERAL SAFETY/SECURITY CASES

Security Breach, California Oils, Richmond CA (11 December): Regular security sweep discovered fence line breach consistent with recent theft activity at the former SSA Richmond terminal. COTP to issue written request to amend FSP security procedures based on recurring activity.

Security Breach, Tesoro, Martinez CA (16 December): UPS driver escorted onto facility, left the presence of escort and was counseled regarding MTSA required security escorting for non-TWIC holders.

NAVIGATIONAL SAFETY

Letter of Deviation (LOD) Automatic Identification System (AIS), M/V COSCO VANCOUVER (14 Dec): The vsl was issued an outbound LOD.

Letter of Deviation (LOD) S-Band Radar, M/V MSC DARTFORD (22 Dec): The vsl was issued an inbound LOD.

SIGNIFICANT INCIDENT MANAGEMENT DIVISION CASES

15 December: SS PETERSBURG (former Naval vessel) discharged approximately .3 gallons of diesel off the deck. The vessel is owned by MARAD, a government entity. Case closed

COAST GUARD DISTRICT ELEVEN

LOSS OF PROPULSION INCIDENTS IN SAN FRANCISCO

2010

				1)10 				
Case Status	Activity ID	Date	Unit	Vessel	IMO#	Vessel Type	Brief Text	INBOUND / OUTBOUND	Location	Latitude	Longitude
Closed	3680570	02/13/2010	SF	CHINOOK MAIDEN	9145841	TANK	Loss of propulsion root cause due to a failed circuit for main engine auilairy air blowers.	Outbound	Pier at Berth 3 in Rodeo	38 03.4 N	122 15.7 W
Closed	3686789	02/24/2010	SF	NASSAU PRIDE	8110320	FREIGHT	Lost propulsion while changing speed from ahead to astern.	Inbound	Pier B-3 USSFO, Port of Redwood City	37 31.0 N	122 12.0 W
Open	3701980	03/24/2010	SF	ANL BINBURRA	9258146	CONTAINER	While at Dead Slow Ahead, engine stopped; insufficient amount of fuel to engine due to lower viscosity fuel would blow by plungers	Inbound	Oakland outer harbor	37 49.3 N	122 18.5 W
Open	3723236	04/23/2010	SF	ID TIDE	9104603	FREIGHT	Loss of propulsion when starting astern propulsion during anchoring; starter pressure hose not properly tightened	Inbound	Anchorage 9	37 43.5 N	122 19.0 W
Open	3737598	05/06/2010	SF	CABO HELLAS	9275725	TANK	Loss of propulsion while operating at dead slow ahead; 3 Puncture valves and fuel injector were defective and leaking fuel	Inbound	Tesoro Amorco Wharf in Martinez	38 03.6 N	122 12.7 W
Open	3743234	05/20/2010	SF	APL EXPERIENCE	9333838	CONTAINER	Loss of propulsion while operating on MGO due to water in the MGO	Inbound	LA/LB offshore	35 29.8 N	122 04.1 W
Open	3744919	05/23/2010	SF	MSC NATAL	9102734	CONTAINER	Loss of propulsion during transit from LA/LB to SF; quick closing valve cut off ships fuel supply	Inbound	LA/LB offshore pilot station	33 46.9 N	118 38.9 W
Open	3751917	05/29/2010	SF	CHIMBORAZO	9174581	TANK	Loss of propulsion while anchoring; air start malfunction	Inbound	Anchorage 9	37 44.4 N	122 20.0 W
Open	3776226	06/23/2010	SF	OCEAN PEARL	9278818	FREIGHT	Loss of propulsion while starting astern propulsion during anchoring; worn o-rings on fuel pump caused fuel to leak	Inbound	Anchorage 8	37 48.4 N	121 24.3 W
Closed	3782196	07/01/2010	SF	ANL BINBURRA	9258146	CONTAINER	Loss of propulsion; faulty lube oil regulating valve, stuck open	Inbound	Offshore SF	37 45.9 N	122 37.8 W
Closed	3797342	07/12/2010	SF	CABO HELLAS	9275725	TANK	While anchoring, vessel lost propulsion; was due to MGO not cooled to required operating parameters, reducing its viscosity	Inbound	Anchorage 9	37 46.4 N	122 20.6 W
Closed	3798263	07/12/2010	SF	KIEL EXPRESS	8902539	CONTAINER	During inbound transit, engine failed to start during astern propulsion test; cause appears to be insufficient amount of fuel while starting with MGO	Inbound	1.5 NM east of sea buoy	37 42.2 N	122 40.4 W
Open	3838806	08/27/2010	SF	APL KOREA	9074535	CONTAINER	Failed start engine while unberthing; not enough air pressure because air supply control switch for aux blowers in off position due to human error	Outbound	Oakland berths	37 47.6 N	122 17.9 W
Open	3862816	09/03/2010	SF	GREAT MOTION	9175468	FREIGHT	During anchoring, vessel lost propulsion due to main engine gear interlock valve being stuck in engaged position.	Inbound	Anchorage 9	37 45.0 N	122 20.0 W
Open	3846543	09/07/2010	SF	CAPT. STEVEN L. BENNETT	1059881	FREIGHT	Upon departure, could not start engine due to dust in pneumatic control system.	Outbound	мотсо	37 43.5 N	122 19.7 W
Open	3845820	09/09/2010	SF	GREAT MOTION	9175468	FREIGHT	Upon departure, could not start engine.	Outbound	Anchorage 9	37 43.0 N	122 18.0 W
Open	3848810	09/12/2010	SF	DELTA PRIDE	9012381	FREIGHT	While mooring, unable to change from stop to dead slow astern while in bridge control. 3-way valve for air start system was stuck in open position.	Inbound	Berth 4 in Pittsburg	38 01.9 N	121 52.3 W
Open	3869161	10/13/2010	SF	FOUR AIDA	9449340	FREIGHT	During inbound transit to Anchorage 9, vessel did not respond to dead slow ahead. Air leak from #4 cylinder.	Inbound	Anchorage 9	37 46.4 N	122 20.6 W

Open	3883205	11/01/2010	SF	ORIENT PHOENIX	9370006	Freight Ship	During inbound transit and while anchoring, astern propulsion would not respond due to fuel pump leak and loss of fuel pressure.	Inbound	Anchorage 9	37 43.0 N	122 18.0 W
Open	3908455	12/10/2010	SF	CMA CGM HUGO	9286231	Container Ship	During inbound transit, loose flange in air control line caused loss of propulsion	Inbound	Oakland turning basin	37 47.7 N	122 18.5 W
Open	3909607	12/11/2010	SF	MOL PROMISE	9236482	Container Ship	During outbound transit, there was a lack of fuel being delivered to the engine due to failure of ball joint linking on fuel rack.	Outbound	Oakland outer harbor	37 47.0 N	122 18.0 W
Open	3913945	12/16/2010	SF	CSAV PANAMBY	9309277	Container Ship	During inbound transit, engine failed when changing speeds. Identified loose electrical connections to blower motor controllers.	Inbound	Oakland berths	37 48.1 N	122 19.5 W
Open	3913171	12/18/2010	SF	FLORIDA VOYAGER	1072068	Tank Ship	During inbound transit, engine failed to answer astern bell. Failure due to fuel switching and fuel pump rack was adjusted to compensate for running low sulfur diesel.	Inbound	Anchorage 9	37 43.0 N	122 18.0 W
Open	3916757	12/23/2010	SF	CHAMPION PIONEER	8800511	Tank Ship	During outbound transit, experienced low pressure air during engine start.	Outbound	Anchorage 9	37 43.0 N	122 18.0 W
Open	3916569	12/27/2010	SF	NASSAU PRIDE	8110320	Freight Ship	During inbound transit, air solenoid for cam shifting not properly working	Inbound	Berth 3, Redwood City	37 39.8 N	122 22.5 W
Open	3918022	12/28/2010	SF	CAP TAPAGA	9127019	Container Ship	During outbound transit, determined that a M/E bypass valve was left open by the C/E during maintenance/ replacement of valve prior to leaving	Outbound	Oakland berths	37 48.5 N	122 19.4 W

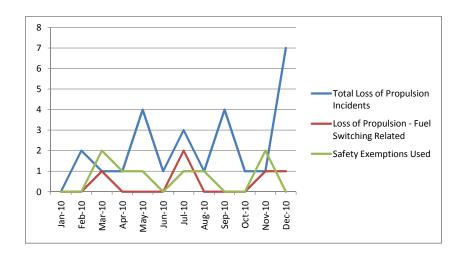
highlighted incidents were fuel switching related

COAST GUARD DISTRICT ELEVEN

LOSS OF PROPULSION INCIDENTS IN SAN FRANCISCO

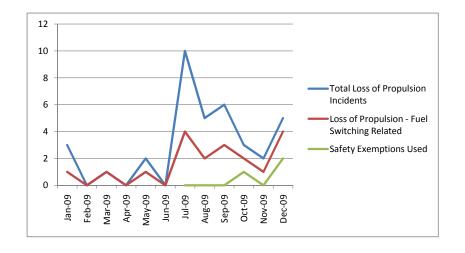
Monthly Totals in 2010

	menuny reture in zere									
	Total Loss of Propulsion Incidents	Loss of Propulsion - Fuel Switching Related	Safety Exemptions Used							
Jan-10	0	0	0							
Feb-10	2	0	0							
Mar-10	1	1	2							
Apr-10	1	0	1							
May-10	4	0	1							
Jun-10	1	0	0							
Jul-10	3	2	1							
Aug-10	1	0	1							
Sep-10	4	0	0							
Oct-10	1	0	0							
Nov-10	1	1	2							
Dec-10	7	1	0							
Totals	26	5	8							



COAST GUARD DISTRICT ELEVEN LOSS OF PROPULSION INCIDENTS IN SAN FRANCISCO Monthly Totals in 2009

	Total Loss of Propulsion Incidents	Loss of Propulsion - Fuel Switching Related	Safety Exemptions Used
Jan-09	3	1	
Feb-09	0	0	
Mar-09	1	1	
Apr-09	0	0	
May-09	2	1	
Jun-09	0	0	
Jul-09	10	4	0
Aug-09	5	2	0
Sep-09	6	3	0
Oct-09	3	2	1
Nov-09	2	1	0
Dec-09	5	4	2
Totals	37	19	3



Harbor Safety Committee Of the San Francisco Bay Region

Report of the U.S. Army Corps of Engineers, San Francisco District January 13, 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) The Essayons has completed the Main Ship Channel. No change.
- **b.** Richmond Outer Harbor (and Richmond Long Wharf) Dredging Richmond Outer Harbor will follow the dredging of the Inner Harbor and will depend on the availability of funds.
- **c. Richmond Inner Harbor** The offloader was not in place until the first week of December, so the project got off to a late start. Additionally, it turned out that there was more material in the Richmond Inner Harbor that had been estimated. Dredging will continue for about another month.
- **d.** Oakland O & M Dredging Contract was awarded September 27, 2010. Dredging will begin as soon as the offloader is available at Hamilton. Dredging is scheduled to begin December 1.
- **e.** Suisun Bay Channel Dredging is complete except for ongoing clean-up of high spots, which is scheduled to be completed by Jan. 21.
- **f. Pinole Shoal** (35+2) Dredging completed July 2. No Change.
- **g. Redwood City/San Bruno Shoal** Dredging is complete. No major dredging for at least a year (mid 2011). No Change.

.

2. **DEBRIS REMOVAL** – The debris total for November was 48 total: Raccoon - 24 tons, Dillard - 17 tons, Safeboat I - 7 tons; and December 2010 was 92 tons: 65 tons by the Raccoon, 22 tons by the Grizzly and 5 tons by the Safeboat.

Jan. 2010		228	2	230			
Feb	17	112	5	134			
March		56.00	16.50	73			
April		40	9	49			
May	7	15		22			
June	5	65		70			
July	9	10		19			
August	7	18		25			
September	9	27	8	44			
October		28	13	41			
Nov/Dec	22	89	29	140			
Totals	76.00	688.00	82.50	847			

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** No additional money appropriated in the President's budget for FY 2011. The Corps is hoping to receive a Congressional add later in FY 2011. This project is moving forward on carry-over money. No change.
- **b.** Sacramento River Deep Water Ship Channel Deepening \$12,500,000 in the FY 2011 budget for this project. The Corps is scheduled to start construction by late FY 2011. The draft Environmental Impact Statement is now scheduled to be released in January 2011.

6. HYDROGRAPHIC SURVEY UPDATE

Address of Corps' web site for completed hydrographic surveys:

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

Main Ship Channel: Post-dredge survey completed on July 10 2010 has been posted.

Pinole Shoal: The post-dredge survey of July 8-10, 2010 has been posted. Suisun Bay Channel: Pre-dredge survey of Sept/Oct 2010 has been posted.

New York Slough: Pre-dredge survey of Oct 2010 has been posted. Bull's Head Channel: December 4 post-dredge 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: A multi-beam survey of April 21 has been posted.

Oakland Inner Harbor - Condition survey of May 18 & 20, 2010 has been posted.

Oakland Outer Harbor: Condition survey of May 17, 2010 has been posted.

Oakland Outer-Outer Harbor: The special Delta-Echo survey of May 5 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: Condition surveys completed in May 12-14, 2010 have been posted.

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

San Rafael Creek and San Rafael Across-the-Flats: Surveys completed March 2010 have been posted.

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) April 2010;

SF-09 (Carquinez) October 5, 2010;

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

SF-11 (Alcatraz): The December 7 survey has been posted. (-37.4)



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

January 13, 2011

- In November the clearinghouse did not have any possible escort violations to notify OSPR about. In December the clearinghouse had 2 possible escort violations for OSPR.
- In November and December the clearinghouse did not receive any notifications of vessels arriving at the Pilot Station without escort paperwork.
- The Clearinghouse has contacted OSPR 6 time in 2010 regarding possible escort violations. The Clearinghouse called OSPR 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 November there were 86 tank vessels arrivals; 3 Chemical Tankers, 14 Chemical/Oil Tankers, 23 Crude Oil Tankers, 1 LPG, 12 Product Tankers, and 33 Tugs with Barges.
- In December there were 86 tank vessels arrivals; 3 Chemical Tankers, 22 Chemical/Oil Tankers, 20 Crude Oil Tankers, 2 LPG's, 14 Product Tankers, and 25 Tugs with Barges.
- In November there were 289 total arrivals. In December there were 301 total arrivals.

San Francisco Bay Clearinghouse Report For November 2010

San Francisco Bay Region Totals

	2010		2009	
Tanker arrivals to San Francisco Bay	53		65	
Barge arrivals to San Francisco Bay	33		42	
Total Tanker and Barge Arrivals	86		107	
Tank ship movements & escorted barge movements	294		355	
Tank ship movements	162	55.10%	203	57.18%
Escorted tank ship movements	79	26.87%	92	25.92%
Unescorted tank ship movements	83	28.23%	111	31.27%
Tank barge movements	132	44.90%	152	42.82%
Escorted tank barge movements	62	21.09%	62	17.46%
Unescorted tank barge movements	70	23.81%	90	25.35%

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	172		276		0		133		581	
Unescorted movements	107	62.21%	160	57.97%	0	0.00%	64	48.12%	331	56.97%
Tank ships	51	29.65%	78	28.26%	0	0.00%	30	22.56%	159	27.37%
Tank barges	56	32.56%	82	29.71%	0	0.00%	34	25.56%	172	29.60%
Escorted movements	65	37.79%	116	42.03%	0	0.00%	69	51.88%	250	43.03%
Tank ships	32	18.60%	55	19.93%	0	0.00%	37	27.82%	124	21.34%
Tank barges	33	19.19%	61	22.10%	0	0.00%	32	24.06%	126	21.69%

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 December 2010

San Francisco Bay Region Totals

	2010		2009	
Tanker arrivals to San Francisco Bay	61		69	
Barge arrivals to San Francisco Bay	25		43	
Total Tanker and Barge Arrivals	86		112	
Tank ship movements & escorted barge movements	295		362	
Tank ship movements	183	62.03%	211	58.29%
Escorted tank ship movements	79	26.78%	99	27.35%
Unescorted tank ship movements	104	35.25%	112	30.94%
Tank barge movements	112	37.97%	151	41.71%
Escorted tank barge movements	55	18.64%	77	21.27%
Unescorted tank barge movements	57	19.32%	74	20.44%

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

Escorts reported to OSPR

2 0

Movements by Zone	Zone 1	%	Zone 2	%	Zone 4	%	Zone 6	%	Total	%
Total movements	170		281		0		128		579	
Unescorted movements	119	70.00%	180	64.06%	0	0.00%	70	54.69%	369	63.73%
Tank ships	55	32.35%	78	27.76%	0	0.00%	33	25.78%	166	28.67%
Tank barges	64	37.65%	102	36.30%	0	0.00%	37	28.91%	203	35.06%
Escorted movements	51	30.00%	101	35.94%	0	0.00%	58	45.31%	210	36.27%
Tank ships	32	18.82%	48	17.08%	0	0.00%	30	23.44%	110	19.00%
Tank barges	19	11.18%	5 3	18.86%	0	0.00%	28	21.88%	100	17.27%

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 2010

San Francisco Bay Region Totals

	2010		2009	
Tanker arrivals to San Francisco Bay	768		758	
Barge arrivals to San Francisco Bay	406		455	
Total Tanker and Barge Arrivals	1,174		1,213	
Tank ship movements & escorted barge movements	3,931		4,076	
Tank ship movements	2,291	58.28%	2,314	56.77%
Escorted tank ship movements	1,020	25.95%	1,069	26.23%
Unescorted tank ship movements	1,271	32.33%	1,245	30.54%
Tank barge movements	1,640	41.72%	1,762	43.23%
Escorted tank barge movements	768	19.54%	778	19.09%
Unescorted tank barge movements	872	22.18%	984	24.14%

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

Escorts reported to OSPR

6

8

Movements by Zone	Zone 1	%	Zone 2	%	Zone 4	%	Zone 6	%	Total	%
Total movements	2,351		3,733		0		1,690		7,774	
Unescorted movements	1,532	65.16%	2,260	60.54%	0	0.00%	887	52.49%	4,679	60.19%
Tank ships	716	30.46%	998	26.73%	0	0.00%	428	25.33%	2,142	27.55%
Tank barges	816	34.71%	1,262	33.81%	0	0.00%	459	27.16%	2,537	32.63%
Escorted movements	819	34.84%	1,473	39.46%	0	0.00%	803	47.51%	3,095	39.81%
Tank ships	463	19.69%	678	18.16%	0	0.00%	413	24.44%	1,554	19.99%
Tank barges	356	15.14%	795	21.30%	0	0.00%	390	23.08%	1,541	19.82%

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 - NOVEMBER COMPARISON

VESSEL TRANSFERS

	Total Transfers	Total Vessel Monitors	Total Transfer Percentage	
NOVEMBER 1 - 30, 2009	211	97	43.13	
NOVEMBER 1 - 30, 2010	194	87	44.85	

CRUDE OIL / PRODUCT TOTALS

	Crude Oil (D)	Crude Oil (L)	Overall Product (D)	Overall Product (L)	GRAND TOTAL
NOVEMBER 1 - 30, 2009	12,507,000		19,455,800	13,731,728	33,187,528
NOVEMBER 1 - 30, 2010	11,353,000		17,901,460	8,278,391	26,179,851

OIL SPILL TOTAL

NOVEMBER 1 - 30, 2009	Terminal	Vessel	Facility	Total	Gallons Spilled
	1	0	0	1	Other / 1 gallon
NOVEMBER 1 - 30, 2010	1	0	0	1	Diesel / 1 gallon

^{***} 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.



CALIFORNIA STATE LANDS COMMISSION

HARBOR SAFETY COMMITTEE MONTHLY REPORT - DECEMBER COMPARISON

VESSEL TRANSFERS

	Total Transfers	Total Vessel Monitors	Total Transfer Percentage	
DECEMBER 1 - 31, 2009	248	107	43.15	
DECEMBER 1 - 31, 2010	210	100	47.62	

CRUDE OIL / PRODUCT TOTALS

	Crude Oil (D)	Crude Oil (L)	Overall Product (D)	Overall Product (L)	GRAND TOTAL
DECEMBER 1 - 31, 2009	11,860,000		19,988,181	13,587,537	33,575,718
DECEMBER 1 - 31, 2010	10,341,000		15,061,800	7,947,071	23,008,871

OIL SPILL TOTAL

DECEMBER 1 - 31, 2009	Terminal	Vessel	Facility	Total	Gallons Spilled
	0	0	0	0	0
DECEMBER 1 - 31, 2010	1	0	0	1	Other / 1 gallon

^{***} 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.

PORTS Work Group CA State Lands Commission

Minutes of Meeting Held on Nov. 30th 2010

Attending:

Joan Lundstrom Chair SF HSC
Alan Steinbrugge Marine Exchange

Bob Chedsey SLC-SF

Olivia Ortega CMA SLC Intern

Esam Amso Valero
Dave Sulouff (by phone) USCG
Jeff Cowan OSPR

Lynn Korwatch Marine Exchange

Marc Bayer Tesoro
John Schneider Tesoro

Items:

1-Discussed progress of new senor installations:

All moving according to plan with the Richmond's to be installed in January, 2011.

2-Dave Sulouff spoke about installing distinctive sector lights on bridges (Laser Beams) to aide safe navigation in periods of FOG details and funds for which can be discussed later but for now, the purpose is to include a sum of money in the next budget. He also indicated the Bay Area bridges clearing heights (as given to him by the person responsible for all the Bay Area bridges, Ken Brown.):-

Bay Area Bridge; AB-195.8', BC-219.8', CD-219.3', DE-219.3', GG-232.5' (225' Safety), UP-135.55'.

Lynn/Alan to contact Port of Oakland for future ship sizes to accommodate for Bay Bridge safety of navigation.

- 3-Enhance PORTS information into AIS
- 4-Caltrans FOG signals information into PORTS

5-2011-2012 Year Budget: to Add Bridge air gap sensor for Bay Bridge, to install and maintain estimate about \$100,000 plus \$20,000 O+M for PORTS proper.

Esam Amso Chair.

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



Richmond, California

January 13, 2011

California Environmental Protection Agency



ARB OGV Clean Fuel Rule Essential Modifications Exemption Applications Summary*

Vessel Applications	No. of Vessels
Total Applications	474
Applications Completed	437
Approved	378
Partially Approved	58**
No Longer Active***	33
Pending/Under Review	4

^{*} Summary from July 1, 2009 to December 31, 2010.

^{**} 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*

Safety Exemptions (per month)					
July -December 2009	11				
January 2010	5				
February 2010	2				
March 2010	5				
April 2010	2				
May 2010	2				
June 2010	1				
July 2010	1				
August 2010	1				
September 2010	0				
October 2010	4				
November 2010	4				
December 2010	2				
Noncomplianc	e Fees				
Total July 2009 – December 31,	4				

ARB OGV Clean Fuel Rule Upcoming Events

- Second Workshop on Proposed Amendments to the Ship Fuel Rule
 - Tentatively planned for Port of Long Beach in February 2011
- Propose extending the clean fuel zone in Southern California
 - recapture lost emission reductions due to vessel route changes
 - reduce vessel traffic through the Point Mugu Sea
 Range

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







Tsunami Planning



San Francisco Bay, San Pablo Bay, and the Carquinez Strait



HUMBOLDT STATE UNIVERSITY

Topics

- Modeling Study
- Results and Recommendations
- Future Plans
- Tsunami messages

Numerical Modeling of Tsunami Effects at Marine Oil Terminals in San Francisco Bay

Jose Borrero, Lori Dengler, Burak Uslu, Costas Synolakis

Report Prepared for:

Marine Facilities Division of The California State Lands Commission,

June 8, 2006

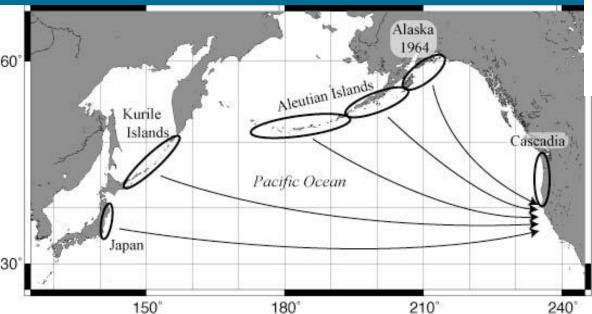
http://www.slc.ca.gov/Division_Pages/MFD/MOTEMS/STUDIES/PART%20Q3%20-%20Numerical%20Modeling.pdf

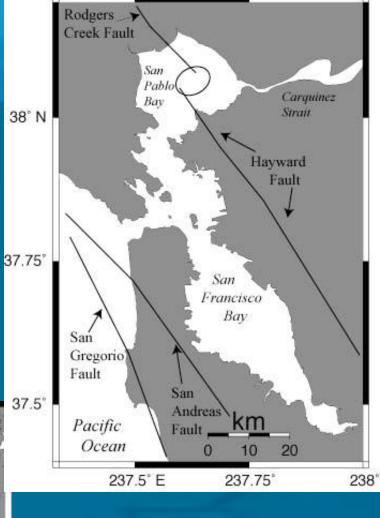
The Study

- Deterministic study to identify the most severe events that could reasonably impact the Marine Oil Terminal sites.
- Looked at best-documented tsunami events are the 1946, 1960 and 1964 tsunamis generated by distant earthquakes in Aleutian Islands, Southern Chile and Prince William Sound, Alaska respectively.
- In addition, three local tsunamis in the 19th century may also have generated waves in excess of 1.6 ft, however none were recorded on tide gages and the height is estimated from eyewitness accounts only.

Location of potentially tsunamigenic faults and slides in the vicinity of San Francisco Bay. The Farallon Islands are offshore, 35 miles west of the Golden Gate.

Source regions in the North Pacific for far field tsunami propagating into San Francisco Bay.

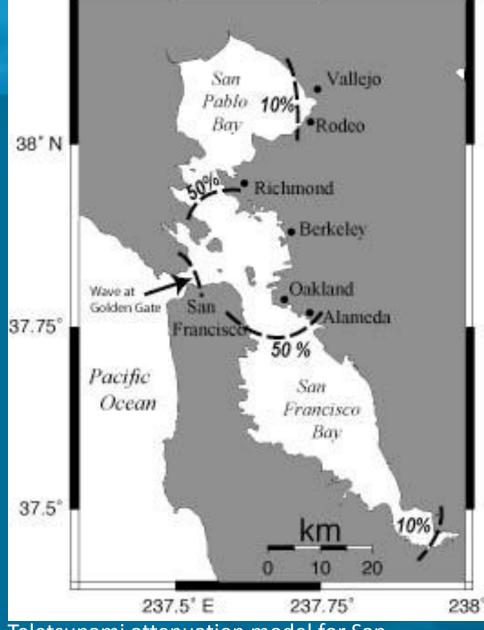




Historical Perspective

- Both near- and far-field sources were considered
 - Large magnitude earthquakes around the Pacific Rim
 - Faults and potential landslide sources just offshore of the San Francisco Bay entrance and within the Bay itself.
- Twenty-three scenarios were modeled, including
 - Landslide in the Farallon Islands
 - 6.6 earthquake in San Pablo Bay
 - 9+ earthquakes around the Pacific Rim.
- Results suggest that large ruptures along the Alaska Peninsula and eastern segments of the Alaska-Aleutian subduction zone present a much greater hazard than any other source region either locally or in the Pacific.

- Magoon (1966) compiled runup data from both the 1960 and 1964 tsunamis within the bay and developed an empirical attenuation model.
- According to his data, the tsunami wave height was reduced by 50% between the Presidio, just inside the Golden Gate, and at Hunter's Point on the San Francisco Peninsula and Richmond or Oakland on the eastern shore of the Bay. The wave height was further reduced to 10% of its original height by the time it reached the northwestern shore of San Pablo Bay and the southern end of San Francisco Bay.

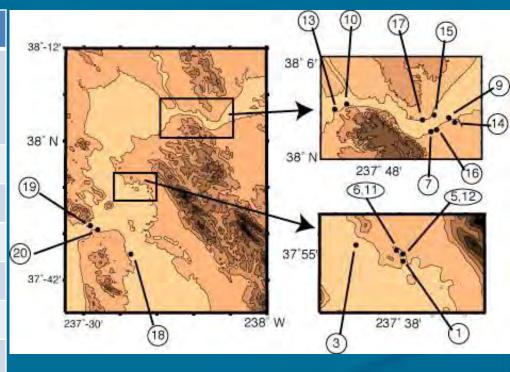


Teletsunami attenuation model for San Francisco Bay based on observations from the

1960 (Chile) and 1964 (Alaska) tsunamis

Water Heights and Current Velocities for Planning Purposes

	Far-Field				
Regional and Terminal ID	Wave height (feet)	Current Speed (knots)			
Richmond, Outer (3)	7.5	2.9			
Richmond, Inner (5)	7.9	5.2			
Martinez (14)	2.3	0.4			
Shelby (10)	2.6	1.0			
Rodeo (13)	2.6	1.2			
Benicia (17)	2.0	0.6			
Portrero District, San Francisco (18)	5.9	2.9			
Entrance to San Francisco Bay (19)	26.2	8.3			
Presidio Fort Point (20)	14.4	14.6			



Note: 1 knots = 0.515 m/s

Note: 1 foot = 0.305 meters

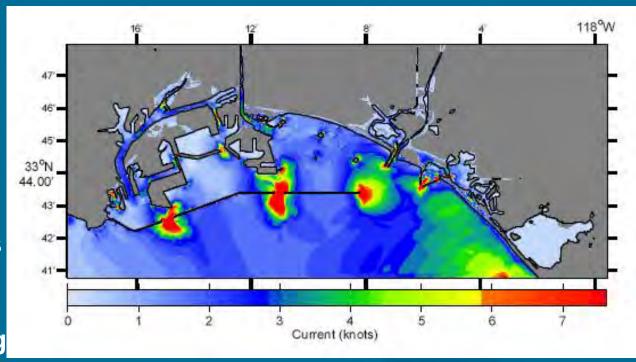
In the Works

- CalEMA Identify offshore safety zones for the maritime community.
- CGS Developing in-harbor tsunami hazard maps using the current velocity data from the state inundation mapping project.
- CalEMA and CGS Developing guidance for the maritime community about if and when it is appropriate for boats to vacate harbors before tsunamis arrive.

Estimated Tsunami Hazards (Strong Currents) for Maritime Communities

Can help with:

- Harbor/marina planning (docks and boat location)
- Evacuation planning for boats
- Emergency response planning for harbor patrol



NOAA PMEL Report, 2010

"Distant Tsunami Threats to Ports of Los Angeles and Long Beach"

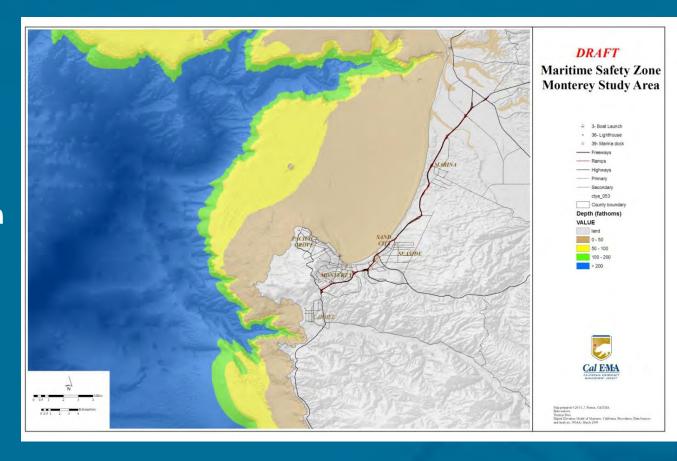




Offshore Safety Zones for Maritime Community

Can help with:

- Locating safe areas for boats
- Developing plan for timing maritime evacuation







Tsunami Messages

- NOAA Weather Radio
- Emergency Alert System (EAS)
- E-mail
 - http://wcatwc.arh.noaa.gov/watcher/tsunamiwatcher.php
- West Coast and Alaska Tsunami Warning Center
 - http://wcatwc.arh.noaa.gov/
- NWS San Francisco Bay Area
 - http://weather.gov/SanFrancisco



NWS Information



- weather.gov
- weather.gov/SanFrancisco
- Telephone number
 - **(831) 656-1725**
- Tom Evans
 - (831) 656-1710 X223
 - tom.evans@noaa.gov

Tsunami Websites

National Weather Service San Francisco Bay Area:

http://weather.gov/SanFrancisco

West Coast and Alaska Tsunami Warning Center:

http://wcatwc.arh.noaa.gov/

Tsunami Bulletin E-mail List:

http://wcatwc.arh.noaa.gov/watcher/tsunamiwatcher.php

California Emergency Management Agency (tsunami page):

http://www.oes.ca.gov/WebPage/oeswebsite.nsf/Content/B1EC51BA215931768825741F005E8 D80?OpenDocument

California Geological Survey (tsunami page):

http://www.tsunami.ca.gov

Numerical Modeling of Tsunami Effects at Marine Oil Terminals in San Francisco Bay: http://www.slc.ca.gov/Division_Pages/MFD/MOTEMS/STUDIES/PART%20Q3%20-%20Numerical%20Modeling.pdf

Tsunami Websites

National Weather Service San Francisco Bay Area:

http://weather.gov/SanFrancisco

West Coast and Alaska Tsunami Warning Center:

http://wcatwc.arh.noaa.gov/

Tsunami Bulletin E-mail List:

http://wcatwc.arh.noaa.gov/watcher/tsunamiwatcher.php

California Emergency Management Agency (tsunami page):

http://www.oes.ca.gov/WebPage/oeswebsite.nsf/Content/B1EC51BA215931768825741F005E8 D80?OpenDocument

California Geological Survey (tsunami page):

http://www.tsunami.ca.gov

Numerical Modeling of Tsunami Effects at Marine Oil Terminals in San Francisco Bay: http://www.slc.ca.gov/Division_Pages/MFD/MOTEMS/STUDIES/PART%20Q3%20-%20Numerical%20Modeling.pdf