John Berge (M), Pacific Merchant Shipping Association (PMSA), Acting Chair of the Harbor Safety Committee of the San Francisco Bay Region (HSC), called the meeting to order at 1009. Alan Steinbrugge (A), 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: Jim Anderson (M), California Dungeness Crab Task Force; Ron Chamberlain (M); Port of Benicia; Capt. Andy Cook (M), Chevron Shipping; Maj. David Kaulfers (A), US Army Corps of Engineers (USACE); Capt. Lynn Korwatch (M), Marine Exchange; William Needham (A), National Boating Federation; Bill Nickson (A), Transmarine Navigation; Walt Partika (A), Foss Maritime; Chris Peterson (M), Port of Oakland; Capt. John Schneider (M), Tesoro Refining & Marketing; Linda Scourtis (A), Bay Conservation and Development Commission, (BCDC); Marina Secchitano (M), Inlandboatingmen’s Union; Deb Self (M), San Francisco Bay Keeper; Capt. Cynthia L. Stowe, United States Coast Guard (USCG); Gerry Wheaton (M), National Oceanic and Atmospheric Administration (NOAA).

Alternates present, and those reporting to the HSC on agenda items: Capt. Esam Amso (A), Valero Marketing and Supply; Bob Chedsey, California State Lands Commission (State Lands); Capt. Jeff Cowan, California Office of Spill Prevention and Response (OSPR); Lt. Cmdr. DesaRae Janzen, USCG; Carol Keiper (A), Oikonos Ecosystem Knowledge; Rob Lawrence, USACE; Peggy Taricco, California Air Resources Board (ARB).

The meetings are always open to the public.

Approval of the Minutes

There were corrections to the minutes of the meeting of September 8, 2011. Lt. Cmdr. Jason Tama’s name is to be spelled correctly throughout the minutes of that meeting. A motion to accept the minutes as corrected was made and seconded. It passed without discussion or dissent.

Comments by the Chair – Berge

- Assembly Bill 1112 had been signed into law. The bill provides for a thirty percent increase in the per-barrel fee that funds OSPR and State Lands Marine Facilities Division. The charge will be in effect for three years only after it takes effect January 1, 2012. The bill also provides for a risk-based inspection program for fuel-transfer operations at anchorage. That program would also end in three years. In his signing message Governor Edmund G. Brown Jr. directed OSPR to raise the non-tank vessel fee. Berge had heard that the Certificate of Financial Responsibility fee was likely to be increased by thirty percent.
Coast Guard Report – Capt. Stowe

- **Capt. Stowe** said that Sector San Francisco was getting back to the normal tempo after a very successful Fleet Week. Over fifty-five local, state, and federal agencies had cooperated to keep the event incident free. The San Francisco Fleet Week was the largest in the nation this year and had featured the aircraft carrier **USS Carl Vinson** in the parade of ships.
- Out reach to recreational boaters and the maritime industry over the America’s Cup event was in the final stages before writing the Notice of Proposed Rule Making. After the notice is published there will be a thirty to ninety day comment period.
- **Capt. Stowe** said that she had held a productive meeting with ARB to discuss loss of propulsion incidents and safety. The key point is that there is a safety exemption and vessels should take it.
- **Peterson** had hosted a meeting for the Bar Pilots and the Coast Guard to discuss the arrival of longer ships to the Port of Oakland. There was great cooperation from all parties.

- **Lt. Cmdr. Janzen** read from the Prevention/ Response report that is attached to these minutes.

Nickson asked what had happened to the names of the vessels that used to be included in the marine casualty descriptions. **Capt. Pete Bonebakker**, ConocoPhillips, said that it was useful for the community to know the names of the vessels that were having problems. **Capt. Stowe** said that only the nature of the incident was of importance to the HSC, but that the names of the vessels could be acquired through the process outlined in the Freedom of Information Act (FOIA). **Secchitano** asked whether the Coast Guard would reconsider its position if presented with a formal request by the HSC. **Capt. Stowe** said that the Coast Guard would consider such a request.

**Capt. Bonebakker** asked whether the dead ship tow mentioned in the report had a pilot on board, and had followed Coast Guard procedures. **Capt. Stowe** answered yes to both questions.

- **Lt. Cmdr. Janzen** provided more details on the Coast Guard’s study of compliance with the voluntary West Coast Offshore Vessel Traffic Risk Management Project (WCOVTRM) promulgated by the Pacific States/British Columbia Oil Spill Task Force. The WCOVTRM recommended that tank vessels remain fifty nautical miles off shore and that non-tank vessels remain twenty-five miles off shore. The information was requested by the HSC at its September 2011 meeting. More information on the WCOVTRM can be found at: http://www.oilspilltaskforce.org/notesreports/wcovtrm_report.htm
- Coastwise Automatic Identification System (AIS) data collected by the Coast Guard tracked 876 vessels from Cook Inlet, Alaska to San Diego, California between August 1, 2011 and August 8, 2011. The compliance rate was ninety-six percent for all vessels. For the four percent of vessels not complying the
tank vessels average thirty nautical miles off shore while the non-tank vessels average eighteen nautical miles off shore.

Chedsey asked what the percentage breakdown was between tank and non-tank vessels not in compliance. Capt. Stowe said that data could be provided for the HSC.

Anderson said that those vessels not in compliance were traveling through fishing grounds and asked whether there was a way to get them further off shore. Capt. Korwatch followed up with a question whether the Coast Guard was in active communication with vessels off shore. Lt. Cmdr. Tama said that the Coast Guard did not actively track or communicate with vessels off shore. Capt. Bonebakker asked whether the WCOVTRM was described in the Coast Pilot. Lt. Cmdr. Janzen said that it was. Wheaton said that he would take steps to see that it was added to Admiralty Sailing Directions.

Secchitano asked what the proposed rule making for the America’s Cup would cover. Capt. Stowe said that it would cover the Coast Guard’s on water control area and spectator management for all events scheduled for 2012 and 2013. Secchitano expressed concern whether the Coast Guard could rely solely upon volunteers given the number and duration of events. Capt. Stowe said that the ultimate responsibility to provide necessary support was on the event planner.

US Army Corp of Engineers Report – Maj. Kaulfers

- A new dredge schedule was included in the attachments to the minutes of the September meeting of the HSC.
- The contract to deepen the Sacramento channel to thirty-five feet had gone through
- Lawrence read from the report that is attached to these minutes.

Capt. Bonebakker asked what was the point of dredging the Sacramento channel to thirty-five feet if Pinole Shoals was higher than thirty-five feet. After a brief discussion on survey leniency versus edge-to-edge survey numbers that involved Lawrence, Capt. Horton, and Wheaton, Berge tasked the Dredge Issues Workgroup to look further into the matter.

Clearing House Report – Steinbrugge

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

OSPR Report – Capt. Cowan

- OSPR had counted seventy-four loss-of-propulsion incidents but only five for the month of September.
- Later in the month of October OSPR and the Coast Guard would manage a survey of the tanker Montebello that was sunk off Cambria, California by a Japanese submarine in the early days of World War II. The concern is that oil from her tanks could leak into the environment as has been the case with the
Jacob Luckenbach that sank off the Farallons in 1953. A remote control submersible will be used to assess the ship’s condition.

- AB 1112 will pay for a new boat and crew to begin inspections of bunker operations at Anchorage 9.
- As mentioned by Berge in his opening remarks, the COFR fee will be raised to 3,025 dollars. A reduction of the OSPR budget by 1.9 million dollars will still be required.
- The Pacific States/British Columbia Oil Spill Task Force is interested in working on a coastwise best practices training video for fuel transfer operations but financing such a project is an issue for them. The video will be one of the topics of conversation at the HSC Summit meeting at Monterey. OSPR remains committed to updating the video even if it must go it alone. The cost of the update runs from fifteen thousand to thirty thousand dollars.

Berge asked who was paying for the Montebello survey. Kara Satra, USCG, said that the survey would be paid for from the Oil Spill Liability Trust Fund.

NOAA Report – Wheaton

- Existing weather conditions were likely to remain in effect for the next week or so.

State Lands Report – Chedsey

Tug Work Group –

- Berge said that Capt. Jonathon Mendes, Starlight Marine, the chair of the workgroup had been unable to attend today’s meeting. He said that their best practices proposal should be ready for a vote at the November meeting of the HSC.

Self asked whether the best practices were on the agenda for the HSC Summit. Berge said that he could not say whether it was on the agenda.

Navigation Work Group – Capt. Horton

- They held a joint meeting with the Physical Oceanographic Real Time System (PORTS) workgroup to receive a manufacturer’s brief on fog sensors. Fog sensors are currently in use at the ports of Baltimore and Mobile. Operations and maintenance funding for the sensors was a concern expressed by those in attendance. There were not enough people in attendance to form a useful consensus on the topic so another meeting on the topic will be scheduled.

Capt. Korwatch said that the California Department of Transportations (Caltrans) has a fog sensor system. They had been very cooperative with the HSC in the past regarding bridge fenders and other issues so perhaps they would be willing to share their data. There was consensus that this was an idea worth pursuing.
There was nothing to report.

Dredge Issues and Physical Oceanographic Real Time System (PORTS) Work Groups – Capt. Schneider

- Their next meeting will take up dredge issues for Pinole Shoal and fog sensors.

Berge asked what was driving the interest in fog sensors. Capt. Stowe said that the Coast Guard was required to come up with guidelines for operations in low visibility conditions but had no way of determining visibility.

Prevention through People Work Group – Needham

- There was nothing to report.

PORTS Report – Steinbrugge

- The wind sensor on the Union Pacific Railroad Drawbridge was off line again.
- Sensors for AMORCO and Avon are scheduled for this year.
- Buoy-mounted sensors were scheduled for service in November.
- A NOAA team was in town checking the tide stations.

Capt. Gary Toledo, Toledo Marine Consulting, asked when the Union Pacific sensor had gone down. Steinbrugge said that it had been down a week and a half.

Public Comment

There was none.

Old Business

Berge said that the California Air Resources Board (ARB) had asked to be let out of its monthly report on fuel switching issues since there was very little new happening on their end. Berge said that they had been very good cooperative with the HSC in the past. Taricco said that since there was now little change on a month to month basis there seemed to be little worth reporting on. She said that they could come back in the future if any big changes were anticipated. There were no objections or comments.

Capt. Horton asked whether it was time for the HSC to elect a chair. Berge said that the chair was appointed by the OSPR Administrator.
Nickson announced a symposium on enhancing marine diesel engine efficiency to be held at the California Maritime Academy November 14. More information is available here: https://calendar.sfmx.org/Lists/Calendar/DispForm.aspx?ID=73

New Business

Berge welcomed Susan Dwyer and Jaime Regal from the Center for Disease Control and Prevention’s San Francisco Quarantine Station. A description of their mission can be found here: http://www.cdc.gov/quarantine/pdfs/san_fran.pdf He thanked Nickson for inviting them to the meeting and encouraged them to contact the committee at any time they felt the need.

Next Meeting

Berge said that the next meeting of the HSC would commence at 1000, Thursday November 10, 2011 at the Port of San Francisco’s Port Commission Room

Adjournment

A motion to adjourn was made and seconded. It passed without discussion or dissent. Berge adjourned the meeting at 1140.

Respectfully submitted:

[Signature]

Capt. Lynn Korwatch
## Prevention / Response - San Francisco Harbor Safety Statistics
### September-11

### 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:** 7
   - Navigation Safety (7), Port Safety & Security (0), ANOA (0)

3. **Marine Casualties (reportable CG 2692) within SF Bay:**
   - Allision (0), Collision (0), Fire (0), Grounding (0), Sinking (0), Steering (1), Propulsion (5), Personnel (0), Other (1), Power (2)

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

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

### Total Port Safety (PS) Cases opened for the period: 22

### Marine Pollution Response

#### Total Vessels

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
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<tbody>
<tr>
<td>U.S. Commercial Vessels</td>
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<tr>
<td>Foreign Freight Vessels</td>
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<tr>
<td>Public Vessels</td>
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<tr>
<td>Commercial Fishing Vessels</td>
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</tr>
<tr>
<td>Recreational Vessels</td>
<td>0</td>
</tr>
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</table>

#### Total Facilities

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
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</thead>
<tbody>
<tr>
<td>Regulated Waterfront Facilities</td>
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<tr>
<td>Regulated Waterfront Facilities - Fuel Transfer</td>
<td>2</td>
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<tr>
<td>Other Land Sources</td>
<td>0</td>
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</table>

#### Mystery Spills - Unknown Sources

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
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</table>

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Spills &lt; 10 gallons</td>
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<tr>
<td>2. Spills 10 - 100 gallons</td>
<td>2</td>
</tr>
<tr>
<td>3. Spills 100 - 1000 gallons</td>
<td>0</td>
</tr>
<tr>
<td>4. Spills &gt; 1000 gallons</td>
<td>0</td>
</tr>
<tr>
<td>5. Spills - Unknown</td>
<td>3</td>
</tr>
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</table>

### Total Oil Discharge and Harmful Materials Release Volumes by Spill Size Category:

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
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</thead>
<tbody>
<tr>
<td>1. Estimated spill amount from U.S. Commercial Vessels:</td>
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</tr>
<tr>
<td>2. Estimated spill amount from Foreign Freight Vessels:</td>
<td>0</td>
</tr>
<tr>
<td>3. Estimated spill amount from Public Vessels:</td>
<td>25</td>
</tr>
<tr>
<td>4. Estimated spill amount from Commercial Fishing Vessels:</td>
<td>0</td>
</tr>
<tr>
<td>5. Estimated spill amount from Recreational Vessels:</td>
<td>0</td>
</tr>
<tr>
<td>6. Estimated spill amount from Regulated Waterfront Facilities:</td>
<td>0</td>
</tr>
<tr>
<td>7. Estimated spill amount from Other Land Sources:</td>
<td>0</td>
</tr>
<tr>
<td>8. Estimated spill amount from Unknown sources:</td>
<td>28</td>
</tr>
</tbody>
</table>

### Total Oil Discharge and/or Harmful Material Release Volumes (Gallons):

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Penalty Cases for Period</td>
<td>1</td>
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<tr>
<td>Notice of Violations (TKs)</td>
<td>0</td>
</tr>
<tr>
<td>Letters of Warning</td>
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</table>

### Total Penalty Actions:

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
### SIGNIFICANT PORT SAFETY AND SECURITY CASES (SEPTEMBER 2011)

#### MARINE CASUALTIES

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 Sep</td>
<td>Container vessel experienced a loss of ship service electrical power while transiting offshore San Francisco Bay. The Captain of the Port required a tug escort from Mile Rock to berth in Concord, CA. Cause was a broken fuel valve. Case pends.</td>
</tr>
<tr>
<td>08 Sep</td>
<td>Dead ship tow allided with the fender system of the south span of the Union Pacific Railroad Bridge in Benicia, CA. No pollution or significant damage to fender or ship. Investigation pends.</td>
</tr>
<tr>
<td>09 Sep</td>
<td>Inspected small passenger vessel experienced a steering malfunction while transiting in vicinity of the Bay Bridge with passengers onboard. An assist vessel towed them back to Pier 39 in San Francisco. Cause is under investigation. Case pends.</td>
</tr>
<tr>
<td>15 Sep</td>
<td>Container vessel experienced a loss of main engine propulsion due to an electrical trip caused by a power cord being crushed during cargo operations. The electrical trip resulted in the main engine central processing unit (CPU) resetting to HFO default settings. The HFO tank suction valve was closed because the ship was operating on MGO thus resulting in the LOP. Repairs have been made and Class attested vessel fully operational. LOP was not attributed to fuel switching. Case pends.</td>
</tr>
<tr>
<td>16 Sep</td>
<td>Container vessel issued an inbound LOD.</td>
</tr>
<tr>
<td>17 Sep</td>
<td>Container vessel issued an inbound LOD.</td>
</tr>
<tr>
<td>18 Sep</td>
<td>Container vessel issued an outbound LOD.</td>
</tr>
<tr>
<td>19 Sep</td>
<td>Container vessel issued an inbound LOD.</td>
</tr>
<tr>
<td>20 Sep</td>
<td>Bulk carrier experienced reduction of power during outbound transit in San Francisco Bay and was directed to Anchorage 8. The number three cylinder fuel pump delivery valve had seized. The valve was replaced with a spare and Class attested vessel fully operational. Reduced propulsion may be attributed to fuel switching. Case pends.</td>
</tr>
<tr>
<td>21 Sep</td>
<td>Oil tanker experienced reduction of propulsion while transiting outbound in the Stockton Deepwater Channel. Chief Engineer reported the reduction was due to a broken fuel valve on the number one cylinder. Vessel was directed to anchor at New York Point to make repairs. When repairs proved ineffective, the vessel transited at reduced power to Anchorage 9 with a one tug escort. The cause of power reduction was due to a defective puncture valve on nozzle 1 cylinder. The valve was replaced and Class attested vessel fully operational. Reduced propulsion may be attributed to fuel switching. Case pends.</td>
</tr>
<tr>
<td>22 Sep</td>
<td>Bulk carrier experienced reduction of power during outbound transit in San Francisco Bay and was directed to Anchorage 8. The number three cylinder fuel pump delivery valve had seized. The valve was replaced with a spare and Class attested vessel fully operational. Reduced propulsion may be attributed to fuel switching. Case pends.</td>
</tr>
<tr>
<td>23 Sep</td>
<td>Oil tanker failed to respond to an astern bell while anchoring in Anchorage 9. The cause of the failure was excessive air leaking through a failed gasket in the start air system. The gasket was replaced and Class verified repairs to be satisfactory. LOP was not attributed to fuel switching. Case pends.</td>
</tr>
<tr>
<td>24 Sep</td>
<td>Tug and oil barge allided with an empty oil barge while docking at Richmond. No pollution but the empty barge sustained an inset in way of its forward void. CG completed damage survey of the damaged barge and no repairs required. Investigation pends.</td>
</tr>
<tr>
<td>25 Sep</td>
<td>Upon approaching the Oakland channel at dead slow, the container vessel's RPM's fluctuated, dropped, and then the main engine shut down. The vessel re-started, ran for approximately 3 minutes and the problem repeated. The vessel altered the RPM range for dead slow from 22 to 25 and proceeded to berth without any problems. The fuel pumps were unable to maintain sufficient fuel pressure at low RPM's due to the low viscosity of MGO. Class approved change of RPM range for operation while on MGO and attested vessel fully operational. LOP was attributed to fuel switching. Case pends.</td>
</tr>
</tbody>
</table>

#### NAVIGATIONAL SAFETY

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>03 Sep</td>
<td>Vessel issued an inbound LOD.</td>
</tr>
<tr>
<td>10 Sep</td>
<td>Vessel issued an inbound LOD.</td>
</tr>
<tr>
<td>12 Sep</td>
<td>Vessel issued an inbound LOD.</td>
</tr>
<tr>
<td>16 Sep</td>
<td>Vessel issued an inbound and outbound LOD.</td>
</tr>
<tr>
<td>19 Sep</td>
<td>Vessel issued an inbound LOD.</td>
</tr>
<tr>
<td>19 Sep</td>
<td>Vessel issued an inbound LOD.</td>
</tr>
</tbody>
</table>

#### SIGNIFICANT INCIDENT MANAGEMENT DIVISION CASES

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 Aug</td>
<td>During an annual inspection and hydrostatic testing of the facility's oil catch pans, a work vessel &quot;incidentally&quot; bumped into a corroded and out of service 2&quot; pipe connected to the #1 sump and discharged 1 gallon of miscellaneous oil trapped within the pipe into the water. Civil Penalty pending.</td>
</tr>
<tr>
<td>11 Sep</td>
<td>Foreign public vessel discharged 25 gallons of Diesel while fueling. Boom and Sorbents were deployed. No enforcement action due to Public Vessel. Case closed.</td>
</tr>
<tr>
<td>14 Sep</td>
<td>During reconstruction of a sea wall at Spinnaker Point, the City of Sausalito and the Yacht Harbor found a buried vessel from the 1940's that was used for landfill. The construction company struck a tank with bunker fuel, but no oil went into the water. 16,000 gallons were recovered, and the City of Sausalito paid for cleanup costs. Case closed.</td>
</tr>
<tr>
<td>20 Sep</td>
<td>An estimated 25 gallons of red diesel observed in area of Point San Pablo Yacht Harbor. IMD was unable to locate a source. Harbor master deployed sorbent pads. Case closed.</td>
</tr>
</tbody>
</table>

---
1. CORPS FY 2011 O&M DREDGING PROGRAM

The following is this year’s O & M dredging program for San Francisco Bay.

   a. Main Ship Channel (55+2) – Dredging work complete. (No change)

   b. Richmond Outer Harbor (and Richmond Long Wharf) – Dredging work is complete, survey posted. (No change)

   c. Richmond Inner Harbor – Dredging work started on Sept. 15 and is expected to be complete by the end of October. The project is being dredged to -38 feet MLLW.

   d. Oakland O & M Dredging – Contract was awarded 15 Aug (Base contract); dredging work is expected to start by the end of October, pending contract modification to beneficially reuse a portion of the dredged material.

   e. Suisun Bay Channel (and New York Slough) – Dredging work is complete, survey posted. (No change)

   f. Pinole Shoal (35+2) – Dredging work is complete, survey posted. (No change)

   g. Redwood City/San Bruno Shoal – Dredging of Redwood City Channel started 2 Sept and is expected to finish by the end of November. This project is being dredged to -28.5 MLLW.

   h. San Rafael Across the Flats and Inner Canal Channels: (NOTE - SHALLOW DRAFT PROJECT) Contract was awarded 23 Sept 2011, dredging work is expected to start in early November and be complete by the end of November. This project is being dredged to -5ft MLLW.

2. DEBRIS REMOVAL – Total for September was 59.2 tons.-- 33.5 for Dillard and 25.7 for Raccoon. Grizzly is rarely used and will be excessed soon and replaced with a former USCG 55’ boat that is currently in Portland district at John Day Dam.
BASEYARD DEBRIS COLLECTION TOTALS:

<table>
<thead>
<tr>
<th>MONTH</th>
<th>GRIZZLY TONS</th>
<th>RACCOON TONS</th>
<th>DILLARD TONS</th>
<th>MISC TONS</th>
<th>TOTAL TONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAN</td>
<td>21</td>
<td>59</td>
<td>5</td>
<td>3</td>
<td>88</td>
</tr>
<tr>
<td>FEB</td>
<td>11</td>
<td>55</td>
<td>33.5</td>
<td>0</td>
<td>99.5</td>
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<tr>
<td>MAR</td>
<td>8.5</td>
<td>134</td>
<td>92.5</td>
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<td>APR</td>
<td>3.5</td>
<td>65</td>
<td>39</td>
<td>5</td>
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<tr>
<td>MAY</td>
<td>0</td>
<td>30.75</td>
<td>22</td>
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<tr>
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<td></td>
<td>731.45</td>
</tr>
</tbody>
</table>

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

Sacramento River Deep Water Ship Channel Deepening - The Corps is scheduled to award the first construction contract in September, 2012.  The Corps is actively coordinating with resource agencies and stakeholders to address comments to the DSEIR/EIS (February 2011).  No change.

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 August 1-2, 2011 has been posted.
Suisun Bay Channel: Post-dredge survey of mid-August 2011 has been posted.
New York Slough: Post-dredge survey of August 11-12, 2011 has been posted.
Bull’s Head Channel: March 10, 2011 condition survey has been posted.
Redwood City: Condition survey completed May, 2011 has been posted.
San Bruno Shoal: Condition survey completed in June, 2011 has been posted.
Oakland Entrance Channel: Surveys completed in August and September 2009 have been posted.
Oakland Inner Harbor Turning Basin: Survey completed April 2010 has been posted.
Oakland Inner and Outer Harbors – Condition surveys dated May 19-25, 2011 have been posted.
Oakland Outer-Otter Harbor: The special Delta-Echo survey of May 5, 2010 has been posted.
Southampton Shoal and Richmond Long Wharf: Surveys of Aug 31-Sept 2, 2011 have been posted.
Richmond Inner Harbor: A preliminary post-dredge survey completed in Dec 2010 and Jan 2011 has been posted.
Northship Channel: Condition survey of June 2011 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 June 2011 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): Oct 4, 2011;
  SF-10 (San Pablo Bay): Oct 4, 2011 survey has been posted;
  SF-11 (Alcatraz): Survey of Oct 4, 2011, has been posted;
  SF-17 (San Francisco Harbor or Ocean Beach Disposal Site): August 2011 survey has been posted.
### DREDGING PLAN FOR FY11

<table>
<thead>
<tr>
<th>Project</th>
<th>OCT FY11</th>
<th>NOV FY11</th>
<th>DEC FY11</th>
<th>JAN FY12</th>
<th>FEB FY12</th>
<th>MAR FY12</th>
<th>APR FY12</th>
<th>MAY FY12</th>
<th>JUN FY12</th>
<th>JUL FY12</th>
<th>AUG FY12</th>
<th>SEP FY12</th>
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</thead>
<tbody>
<tr>
<td><strong>Oakland Inner Harbor</strong></td>
<td></td>
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<td>660kcy</td>
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<tr>
<td><strong>Richmond Inner Harbor</strong></td>
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<td>550kcy</td>
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<tr>
<td><strong>Richmond Outer Harbor</strong></td>
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<td></td>
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<td>ESSAYONS 12 DAYS</td>
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<tr>
<td><strong>Suisun Bay Channel</strong></td>
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<td>ESSAYONS 10 DAYS</td>
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<td><strong>Crescent City</strong></td>
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<td>30kcy</td>
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<tr>
<td><strong>San Rafael</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td>40kcy</td>
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<tr>
<td><strong>Sac River Deepening</strong></td>
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<td>1mcy</td>
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<tr>
<td><strong>Pinole Shoal</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>ESSAYONS 3 DAYS</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>SF Main Ship Channel</strong></td>
<td></td>
<td></td>
<td></td>
<td>ESSAYONS 14 DAYS</td>
<td></td>
<td></td>
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<td>No Window</td>
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<tr>
<td><strong>Humboldt Bar &amp; Entrance</strong></td>
<td>ESSAYONS 25 DAYS</td>
<td></td>
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<td>No Window</td>
</tr>
<tr>
<td><strong>Humboldt Channels</strong></td>
<td>YAQUINA 30 DAYS</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>300kcy</td>
</tr>
</tbody>
</table>

- **Complete & Ongoing Contracts**
- **Government Hopper**
- **New Dredge Contract**
- **Environmental Window**

*Updated: 23 Sept 11*
In September the clearinghouse did not contact OSPR regarding any possible escort violations.

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


In September there were 88 tank vessel arrivals; 4 Chemical Tankers, 14 Chemical/Oil Tankers, 26 Crude Oil Tankers, 1 LPG, 16 Product Tankers, and 27 Tugs with Barges.

In September there were 311 total arrivals.
San Francisco Bay Clearinghouse Report For September 2011

San Francisco Bay Region Totals

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tanker arrivals to San Francisco Bay</td>
<td>61</td>
<td>62</td>
</tr>
<tr>
<td>Barge arrivals to San Francisco Bay</td>
<td>27</td>
<td>25</td>
</tr>
<tr>
<td>Total Tanker and Barge Arrivals</td>
<td>88</td>
<td>87</td>
</tr>
<tr>
<td>Tank ship movements &amp; escorted barge movements</td>
<td>292</td>
<td>291</td>
</tr>
<tr>
<td>Tank ship movements</td>
<td>177</td>
<td>182</td>
</tr>
<tr>
<td>Escorted tank ship movements</td>
<td>97</td>
<td>81</td>
</tr>
<tr>
<td>Unescorted tank ship movements</td>
<td>80</td>
<td>101</td>
</tr>
<tr>
<td>Tank barge movements</td>
<td>115</td>
<td>109</td>
</tr>
<tr>
<td>Escorted tank barge movements</td>
<td>48</td>
<td>51</td>
</tr>
<tr>
<td>Unescorted tank barge movements</td>
<td>67</td>
<td>58</td>
</tr>
</tbody>
</table>

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

Escorts reported to OSPR 0 0

<table>
<thead>
<tr>
<th>Movements by Zone</th>
<th>Zone 1</th>
<th>%</th>
<th>Zone 2</th>
<th>%</th>
<th>Zone 4</th>
<th>%</th>
<th>Zone 6</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total movements</td>
<td>180</td>
<td>274</td>
<td>0</td>
<td>125</td>
<td>579</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unescorted movements</td>
<td>123</td>
<td>68.33%</td>
<td>177</td>
<td>64.60%</td>
<td>0</td>
<td>0.00%</td>
<td>76</td>
<td>60.80%</td>
<td>376</td>
<td>64.94%</td>
</tr>
<tr>
<td>Tank ships</td>
<td>80</td>
<td>44.44%</td>
<td>97</td>
<td>35.40%</td>
<td>0</td>
<td>0.00%</td>
<td>42</td>
<td>33.60%</td>
<td>219</td>
<td>37.82%</td>
</tr>
<tr>
<td>Tank barges</td>
<td>43</td>
<td>23.89%</td>
<td>80</td>
<td>29.20%</td>
<td>0</td>
<td>0.00%</td>
<td>34</td>
<td>27.20%</td>
<td>157</td>
<td>27.12%</td>
</tr>
<tr>
<td>Escorted movements</td>
<td>57</td>
<td>31.67%</td>
<td>97</td>
<td>35.40%</td>
<td>0</td>
<td>0.00%</td>
<td>49</td>
<td>39.20%</td>
<td>203</td>
<td>35.06%</td>
</tr>
<tr>
<td>Tank ships</td>
<td>29</td>
<td>16.11%</td>
<td>42</td>
<td>15.33%</td>
<td>0</td>
<td>0.00%</td>
<td>20</td>
<td>16.00%</td>
<td>91</td>
<td>15.72%</td>
</tr>
<tr>
<td>Tank barges</td>
<td>28</td>
<td>15.56%</td>
<td>55</td>
<td>20.07%</td>
<td>0</td>
<td>0.00%</td>
<td>29</td>
<td>23.20%</td>
<td>112</td>
<td>19.34%</td>
</tr>
</tbody>
</table>

Notes:
1. Information is only noted for zones where escorts are required.
2. All percentages are percent of total movements for the zone.
3. Every movement is counted in each zone transited during the movement.
4. Total movements is the total of all unescorted movements and all escorted movements.
San Francisco Bay Clearinghouse Report For 2011

San Francisco Bay Region Totals

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tanker arrivals to San Francisco Bay</td>
<td>574</td>
<td>699</td>
</tr>
<tr>
<td>Barge arrivals to San Francisco Bay</td>
<td>244</td>
<td>371</td>
</tr>
<tr>
<td>Total Tanker and Barge Arrivals</td>
<td>818</td>
<td>1,070</td>
</tr>
</tbody>
</table>

Tank ship movements & escorted barge movements 2,632 3,528
- Tank ship movements 1,700 64.59% 2,070 58.67%
  - Escorted tank ship movements 862 32.75% 925 26.22%
  - Unescorted tank ship movements 838 31.84% 1,145 32.45%
- Tank barge movements 932 35.41% 1,458 41.33%
  - Escorted tank barge movements 366 13.91% 683 19.36%
  - Unescorted tank barge movements 566 21.50% 775 21.97%

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

Escorts reported to OSPR 3 6

<table>
<thead>
<tr>
<th>Movements by Zone</th>
<th>Zone 1</th>
<th>%</th>
<th>Zone 2</th>
<th>%</th>
<th>Zone 4</th>
<th>%</th>
<th>Zone 6</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total movements</td>
<td>1,642</td>
<td>%</td>
<td>2,531</td>
<td>%</td>
<td>0</td>
<td>%</td>
<td>1,090</td>
<td>%</td>
<td>5,263</td>
<td>%</td>
</tr>
<tr>
<td>Unescorted</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Tank ships</td>
<td>1,151</td>
<td>70.10%</td>
<td>1,679</td>
<td>66.34%</td>
<td>0</td>
<td>0.00%</td>
<td>659</td>
<td>60.46%</td>
<td>3,489</td>
<td>66.29%</td>
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<tr>
<td>Tank barges</td>
<td>670</td>
<td>40.80%</td>
<td>852</td>
<td>33.66%</td>
<td>0</td>
<td>0.00%</td>
<td>348</td>
<td>31.93%</td>
<td>1,870</td>
<td>35.53%</td>
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<tr>
<td>Escorted</td>
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<tr>
<td>Tank ships</td>
<td>491</td>
<td>29.90%</td>
<td>852</td>
<td>33.66%</td>
<td>0</td>
<td>0.00%</td>
<td>431</td>
<td>39.54%</td>
<td>1,774</td>
<td>33.71%</td>
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<tr>
<td>Tank barges</td>
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<td>13.09%</td>
<td>334</td>
<td>13.20%</td>
<td>0</td>
<td>0.00%</td>
<td>178</td>
<td>16.33%</td>
<td>727</td>
<td>13.81%</td>
</tr>
</tbody>
</table>

Notes:
1. Information is only noted for zones where escorts are required.
2. All percentages are percent of total movements for the zone.
3. Every movement is counted in each zone transited during the movement.
4. Total movements is the total of all unescorted movements and all escorted movements.
<table>
<thead>
<tr>
<th>VESSEL TRANSFERS</th>
<th>Total Transfers</th>
<th>Total Vessel Monitors</th>
<th>Total Transfer Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPTEMBER 1 - 30, 2010</td>
<td>229</td>
<td>85</td>
<td>37.12</td>
</tr>
<tr>
<td>SEPTEMBER 1 - 30, 2011</td>
<td>200</td>
<td>70</td>
<td>35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CRUDE OIL / PRODUCT TOTALS</th>
<th>Crude Oil ( D )</th>
<th>Crude Oil ( L )</th>
<th>Overall Product ( D )</th>
<th>Overall Product ( L )</th>
<th>GRAND TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPTEMBER 1 - 30, 2010</td>
<td>12,013,586</td>
<td>0</td>
<td>16,938,200</td>
<td>6,794,050</td>
<td>23,732,250</td>
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<tr>
<td>SEPTEMBER 1 - 30, 2011</td>
<td>14,291,500</td>
<td>0</td>
<td>19,047,427</td>
<td>6,451,596</td>
<td>25,499,023</td>
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</table>

<table>
<thead>
<tr>
<th>OIL SPILL TOTAL</th>
<th>Terminal</th>
<th>Vessel</th>
<th>Facility</th>
<th>Total</th>
<th>Gallons Spilled</th>
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</thead>
<tbody>
<tr>
<td>SEPTEMBER 1 - 30, 2010</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SEPTEMBER 1 - 30, 2011</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5 Gallons Additive-Other</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Total Transfers</th>
<th>Total Vessel Monitors</th>
<th>Total Transfer Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JANUARY 1, 2010 to DECEMBER 31, 2010</strong></td>
<td>2631</td>
<td>1139</td>
<td>43.29</td>
</tr>
</tbody>
</table>

### Crude Oil / Product Totals

<table>
<thead>
<tr>
<th></th>
<th>Crude Oil (D)</th>
<th>Crude Oil (L)</th>
<th>Overall Product (D)</th>
<th>Overall Product (L)</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JANUARY 1, 2010 to DECEMBER 31, 2010</strong></td>
<td>147,016,955</td>
<td>300,000</td>
<td>205,374,688</td>
<td>93,651,082</td>
<td>299,025,770</td>
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</table>

### Oil Spill Total

<table>
<thead>
<tr>
<th></th>
<th>Terminal</th>
<th>Vessel</th>
<th>Facility</th>
<th>Total</th>
<th>Gallons Spilled</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JANUARY 1, 2010 to DECEMBER 31, 2010</strong></td>
<td>*** PLEASE SEE ATTACHED. ***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Disclaimer:**

Please understand that the data is provided to the California State Lands Commission from a variety of sources; the Commission cannot guarantee the validity of the data provided to it.
A. GENERAL INFORMATION

1. The marine waters of California are environmentally sensitive and a precious environmental and economic resource. Bunkering operations, while routine in many parts of the country, do in fact pose risks different than those normally expected of standard shore to ship oil transfer operations. The California Department of Fish and Game (DFG), Office of Spill Prevention and Response (OSPR), and representatives of the shipping and petroleum industry have jointly developed the following guidelines to address those risks and ensure safe bunkering operations in the State of California. They recognize that the safe transfer of fuel oil into a vessel requires diligence, safety consciousness and the use of proper procedures. Safe bunkering is the product of good communication, proper crew training and compliance with international, federal, state and local laws including but not limited to;

"Any owner, operator, or person-in-charge of an onshore or offshore facility or vessel over which the U.S. has jurisdiction (i.e., a U.S. vessel or a facility or foreign vessel in U.S. waters) from which oil or an EPA designated hazardous substance is discharged in "such quantities as may be harmful" into navigable waters of the U.S., upon the adjoining shorelines, into contiguous zone waters, in connection with activities under the OSCLA or the DPA, or that may affect natural resources under exclusive U.S. management authority, is subject to a civil penalty assessment separate from any other civil or criminal penalty or liability imposed by the Federal Water Pollution Control Act (FWPCA) (except in the case of certain EPA permit related discharges). This act prescribes that a civil penalty of not more than $5,000 for each offense shall be assessed. The FWPCA also requires that the person-in-charge of the vessel or facility must, as soon as acquiring knowledge of any discharge of "such quantities as maybe harmful" of oil or reportable quantity of hazardous substance, immediately notify the appropriate agency (the Coast Guard). The NRC has been identified as the primary location for receiving reports of oil discharges or hazardous substances releases. When the NRC cannot be contacted, 33 CFR 153.203 lists other agencies that may be notified. Failure to give immediate notice makes the responsible person subject to criminal penalties of not more than $10,000 or a year's imprisonment, or both. Masters, licensed officers and operators, and other persons certificated by the Coast Guard may also be subject to suspension and revocation (S&R) proceedings conducted under the authority of 46 U.S.C. Chapter 77 and 46 CFR 5. Discharges may also result in other civil penalty and criminal fine provisions under Section 309 of the FWPCA, the Rivers and Harbors Act 99 (the Refuse Act), and the APPS 1980."


Asterisks (*) denotes a Regulation that is already in place and not a best practice.

Harbor Safety Committees of California
2. Bunkering Operations within California waters are subject to U.S. Coast Guard regulations, Title 33 Code Federal Regulations, Parts 155 and 156, and California Code of Regulations (CCR) *, Title 14, Chapter 3, Subchapter 6. These regulations are listed in paragraph 7 below. Beyond the regulations, the guidelines below represent the cooperative efforts of OSPR and stakeholders to develop the best way to further mitigate risks to the environment during bunkering operations. As such, it is expected that industry members follow them, educate and enforce them among industry groups and make recommendations to OSPR, and the appropriate local Harbor Safety Committees as changes are needed. Vessels intending to conduct bunkering operations while at anchor should also carefully review the guidance in the following additional best maritime practice.

3. Some bunkering operations are conducted alongside vessels at berth and, in the case of container vessels, may be conducted simultaneously with container operations. This adds some additional risk to bunkering operations and the personnel involved for which additional precautions are necessary. The procedures associated with these bunkering operations are covered in the Harbor Safety Plans.

4. The OSPR and the U.S. Coast Guard inspectors frequently monitors fuel/oil transfer operations throughout all of California’s harbors and bays based on the level of risk, amount of fuel/oil, familiarity with company operations, procedures and track records. Either agency may stop any bunkering operation or prohibit planned operations due to safety concerns or unacceptable risk.

5. The OSPR will periodically review the safety record of bunkering operations and work with the Harbor Safety Committees to determine if changes are needed to promote safety. Changes could include additional best maritime practices or a formal regulatory initiative.

6. **Definitions**: In addition to the terms defined in applicable federal regulations, the following definitions apply:
   a. Bunkering: The transfer of petroleum base products from one vessel to another vessel for the purpose of replenishing fuel for vessel propulsion, hotel services or machinery lubrication while at anchor or dockside.
   b. Receiving Vessel: The vessel receiving the fuel or lubes in a bunkering operation.
   c. Delivering vessel: The vessel delivering the fuel or lubes in a bunkering operation.
   d. Moderate Weather: Sustained winds from 21 to 33 knots or higher gusts (Small Craft Advisory).
   e. Heavy Weather: Sustained winds from 34 to 47 knots or higher gusts (Gale Warnings).

7. **Regulations**: Bunkering operations must be conducted in strict accordance with the letter and intent of all regulations. If there is a conflict, real or perceived, between the regulations and the guidelines in this document, then the regulations shall take precedence. However, any such Asterisks (*) denotes a Regulation that is already in place and not a best practice.

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conflict should be reported to the applicable Harbor Safety Committee. In the state of California Bunkering operations fall under following regulations:

- 33 CFR 152 Notice of Discharge and Removal of Discharged Oil*
- 33 CFR 155 Oil or Hazardous Material Pollution Prevention Regulations for Vessels*
- 33 CFR 156 Oil and Hazardous Material Transfer Operations*
- 46 CFR 30-40 Tank Vessels*
- CCR Title 14 , Chapter 3, Subchapter 6 Oil Transfer and Vessel Operations*

Additionally, bunkering activities may also be subject to local regulations and terminal requirements and or guidelines. As laws and regulations may change from time to time, a vessel operator should check with their agent and/or local authorities for the most current regulations and requirements.

B. Best Maritime Practices – BUNKERING

Maritime safety is a people process. Virtually every marine accident or oil spill is the result of human error. The below Best Maritime Practices have been developed to further mitigate the risk of spills to deck and or water. It is well-trained people working conscientiously together that make safe seamanship a reality.

1. Prior to Arrival of the Receiving Vessel

   a. Pre-Arrival Information (Receiving Vessel)

   Prior to bunkering, the following information will be provided to the delivering barge company by the receiving vessel:

   - Estimated time of arrival.
   - Location in port where bunkering will take place.
   - Name and Contact information for the vessel’s QI (Qualified Individual).
   - Copy of California Vessel Oil Spill Contingency Plan Approval Letter.
   - Confirmation of Federal and State Certificates of Financial Responsibility (‘COFR’).
   - Verification of the OSPR required spill kit onboard the ship.
   - Location of bunker station
     - distance forward from the vessel’s stern.
     - distance of bunker connection from water line to rail.
     - distance of bunker connection from rail.
     - bunker manifold flange size and bolt configuration.
     - Side of vessel, port or starboard.
   - Complete the Pre-Arrival Check List.
   - Acknowledgement that Hot Work and other restricted activity will not be conducted until the delivering vessel has departed.

Asterisks (*) denotes a Regulation that is already in place and not a best practice.

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b. **Notifications** *

The bunker barge operator shall make delivery notification to the U.S. Coast Guard, OSPR representative and to their contract rated Oil Spill Response Organization (OSRO) noting location, time, and expected duration of the bunker delivery, with the amount being delivered. The ship will make notification to their OSRO and their twenty-four hour shore side QI, noting location and time of delivery.

c. **Identify Person-In-Charge** *

The first step in safe bunkering is to identify the vessel’s Person-In-Charge (‘PIC’), who is responsible for the bunkering operation. They must be a licensed or authorized master, mate or engineer.

d. **Identify the Oil Transfer Procedures**

The PIC must identify and be familiar with the vessel’s oil transfer procedures.  

*Oil Transfer Procedures shall be prominently posted for easy reference!*  

- Transfer Procedures shall include;  
  - The location of pipelines, valves, vents and overflows,  
  - The numbers and duties of people assigned to the transfer operation,  
  - All relevant procedures before, during and following oil transfer,  
  - Detail critical steps for communication,  
  - Steps for topping off tanks, and  
  - Steps for initiating an emergency shutdown.  
  - Weather and sea state limits that require transfer shutdown.

e. **Designate Key Transfer Personnel** *

The Person-In-Charge is responsible for ensuring an adequate number of personnel are ready and available to safely execute the transfer process. While the number may vary with the ship, weather, and port there shall be no less than 3 individuals on the receiving vessel assigned to the operation, and these individuals shall have no other assigned duties during the transfer process.

f. **Develop a Pre-Loading Plan (Receiving Vessel)**

Pre-Loading Plan Includes;  

- Tanks and Capacities  
- Oil Level and Type  
- Expected Final Tank Gauges and Percentage of Tank Capacity  
- Tank Loading Sequence
• Monitoring Procedures
  monitoring includes the fuel oil transfer as well as tank levels and valve alignments.
• Post a Completed Load Plan
• Max pressure at ships manifold
• Max rate of transfer

• Personnel shall include:
  o Person-In-Charge (PIC) – Responsible for the transfer operation.*
  o Point-of-Transfer Watch – This person remains at the connecting point between the transferring and receiving vessels throughout the transfer process.
  o Deck Rover Watch – Responsible for monitoring the deck and over the sides for spills; should be aware of all the source locations for a potential release of oil.
  o Additional Personnel – Good seamanship dictates that there will be circumstances that require the receiving vessel to assign additional personnel. They may include but are not limited to the following.
    ▪ Monitoring of multiple tank levels at different locations.
    ▪ Topping of tanks.
    ▪ Need for an anchor watch.
    ▪ Rain or other environmental circumstances that affect the operation.

• The PIC will ensure that all personnel on their vessel assigned to the transfer operation are well rested and within their work hour limitations. Even a crewmember within their work hour limitations can be fatigued due to a number of circumstances. A fatigued crewmember should be relieved by a rested crewmember.

g. Pre-Arrival Training
A good bunkering operation begins with proper preparation. Everybody who is involved in the training session should be told everything about the bunker operation. Not more than 48 hours prior to arrival, all members of the crew that may be called upon to participate in the loading operation shall attend a training session. Training shall include:

• Review Bunkering -- Best Maritime Practices (BMP)
• Review Vessel Specific Transfer Procedures
• Review Crew Roles and Responsibilities
• Review Pre-Loading Plans
• Communication Procedures

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Harbor Safety Committees of California
Stop the Transfer Responsibility

*Ensure everyone involved in the bunkering operation knows he or she has the responsibility to stop the transfer process at any time, should anything appear to be out of order.*

*If watches will change during the bunkering operation, include relief personnel in training session and the pre-loading plan.*

A log entry shall be made of the crewmembers, their rating and the time of the training session.

2. **Bunkering Operations**

   a. **Prepare Deck and Receiving Areas**

      To include, but may not be limited to the following:

      - Close and secure all required hatches, doors and portholes.
      - Seal all scuppers and drains from which overflowing oil might spill over the side of the vessel.
      - Ensure a well-lit receiving area to provide for efficiency, safety and crew alertness.
      - Post all proper warning signs and signals.
      - Make a visual inspection of all the applicable equipment on both the receiving and delivering vessels.

   b. **Mooring Equipment**

      The delivering vessel shall be responsible for the safe mooring of their vessel alongside the receiving vessel. They shall use fenders of sufficient size and type to prevent steel to steel contact between the two vessels. Mooring lines will be of sufficient size and type to hold the delivering vessel alongside the receiving vessel during the maximum expected tidal, wave, and wind conditions.

   c. **Provide Safe Access Between Vessels**

      The receiving vessel must provide safe access to and from the barge utilizing a gangway or an appropriate accommodation ladder, in order to facilitate face to face communications between the receiving and the delivering vessels for purposes for a pre-transfer conference and other required communications.

      Where safe access cannot be provided an alternate method of facilitating a face to face conference must meet the following guidelines and a notification will be made to OSPR and USCG by the delivering vessel:

      - Both the receiving vessel and delivering vessel’s PICs will still execute a conference in sight of each other with a clear method of communication in
order to cover all items outlined in the pre-transfer document as well as the Declaration of Inspection.*

- Direct communications between PIC’s will be made in order to alert the delivering vessel when the receiving vessel is topping off, or switching between tanks.*
- Reiterate the need for a 10 minute standby notice before any tank switches.
- Direct communications between both PICs no less than every 20 minutes.

d. **Establish Communications** *

The receiving vessel and delivering vessel shall agree on the communications to be used during the process. These include:

- Coordinating radio frequencies,
- Common English phrases,
- Proper hand signals, and
- Use of air horns.

*Ensure everyone involved knows he or she has the responsibility to stop the transfer process at any time, should anything appear to be out of order*

e. **Conduct a Pre-Transfer Conference**

Each pre-transfer conference is unique. Different people, different languages, different fuel requirements, different conditions all play a role in determining the content and structure of the conference. Out of these differences, a common understanding must be established and a common process used. The pre-transfer conference must include the following:

- Be conducted in English.
  
  A vessel agent can arrange for a translator or interpreter. If one is necessary they must remain for the duration of the transfer operation.
- Be conducted face to face. (Except as allowed for in Section c.)
- Thoroughly review the Declaration of Inspection (DOI) and Load Plans, with both PICs discussing and initialing each item including:* 
  - Products, Sequence and Flow rate of Oil*
  - Key Procedures*
  - Identify Key Personnel*
  - Watch Changes*
  - MSDS information for the product(s) to be transferred*
  - Notification of Shutdown or topping off procedures.*

f. **Connect Oil Transfer Hose** *

Be sure to handle the hose carefully. It may still contain oil from a previous transfer.

The receiving vessel shall:

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- Check the hose for obvious defects.
- Check the hose support and lead. The weight of the hose should not put undue strain on the manifold, rail or other fittings.
- Use a new unused gasket.
- Tighten all bolts, evenly, with a matching bolt in every hole.
- Double check alignment of all valves.
- Ensure containments are kept free and clear of debris and rain water.

g. **Complete and Sign the Declaration of Inspection (DOI)**
   Both vessels must keep a copy of the DOI for 30 days, along with a copy of the vessels load plan.

h. **Begin Fuel Delivery**
   - Fuel flow should commence at a slow rate.
   - *All tanks should be sounded to ensure fuel is loading into the designated tanks and not into the wrong tanks.*
   - The pressure should be monitored on the delivering and the receiving vessel's manifold. A high pressure reading could signal a blockage or improper alignment.
   - Receiving vessel must alert barge crew at least 10 minutes before changing tanks, topping off tanks, or securing the loading operation.
   - The delivering vessel and receiving vessel should compare the amount of fuel transferred between each vessel and at regular intervals. If upon comparison in the amount of fuel transferred, a discrepancy of concern is identified, the transfer should be secured until the discrepancy is rectified.
   - Bunker transfer rate should be compared at regular intervals. This practice will help to avoid tank overfills and enable a PIC to estimate the time for topping off tank(s) or stripping of tank(s), tank switching and time of completion.
   - Maintain constant communication. A regular schedule of communications should be established. Not to exceed 20 minute intervals, a status report exchange between the receiving vessel and delivering vessel shall take place.
   - Verify operation and accuracy of gauging systems.
   - Test and verify bunker tanks alarm, settings and overfill alarm units.
   - Bunker tanks which have been secured should be checked frequently during the remaining loading operations to avoid an overflow.

i. **Securing Bunker Operations and Disconnecting Transfer Hose**
   Upon securing of bunker operations;
   Asterisks (*) denotes a Regulation that is already in place and not a best practice.
• Check to make sure there is no flow at the manifold before closing the bunker manifold valve.
• The PIC’s on both vessels should check fuel tank levels and verify all valves are securely closed.
• The receiving and delivering vessel’s crews should verify that the hose is depressurized and drained back into the barge.
• The hose connection shall be blanked and bolted with a matching bolt in every hole. * It should be cleaned of any surface oil before being passed back to the delivery vessel.
• Hot Work and other restricted activity should remain secured until the delivering vessel has departed.

j. **Number of Vessels Involved**
   A receiving vessel may receive bunkers and lubricating oils from two separate delivering vessels at the same time, provided:
   • Each transfer has a separate Person in Charge (‘PIC’) unless otherwise approved by the Coast Guard Captain of the Port.
   • That each system is completely separate from the other or is otherwise effectively isolated or segregated by means of blank (spectacle) flanges which may be visually verified.

3. **Should a Spill Occur**
   a. **STOP THE PRODUCT FLOW**
      • Notify the barge immediately to Shut Down and inform the barge of what happened and whether or not the flow has been stopped.
      • Delivery vessel to inform receiving vessel when transfer is stopped.
      • Bunker manifolds to be shut.
      • When shut down, advise delivery vessel if outflow has stopped.
      • Barge to commence deploying boom. (Even if release is not believed to have reached the water).
   b. **WARN PERSONNEL**
      • Ensure the personnel on the ship, barge and shore are aware of the spill and are taking the necessary precautions to remain safe and secure the vessel.
   c. **SHUT OFF IGNITION SOURCES**
      • Motors, electrical circuits, open flames, welding, etc.
   d. **CONTAIN / CONTROL SPILL**
      • Ensure the barge is deploying their boom
      • Check ship’s containment to ensure it is effective and sufficient
   e. **MAKE APPROPRIATE NOTIFICATIONS AS PER VESSEL OIL SPILL CONTINGENCY PLAN*”

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• CCR, Title 14, Chapter 3, §817.03(g) and §827.02(d), Shall make notification within 30 minutes, after discovery of a discharge or threatened discharge of oil into marine water. Required notifications shall not be construed as requiring notification before response.
• Communicate the incident to your company QI/OSRO*
  • Injuries
  • Damage
  • Extent of release
  • Resources required
• State of California’s CalEMA*
• National Response Center*

f. Notify U.S. Coast Guard Vessel Traffic Service (VTS)

4. Port Specific Items
   a. Heavy Weather
   • Wind: Vessels will not come alongside in preparation for bunkering at anchor or pier side if sustained winds are at or exceed 34 knots. If bunkering operations have already begun when sustained wind reach 28 knots personnel in charge of bunkering operations will continuously monitor environmental conditions and take any additional measures necessary to reduce risk of injury, vessel damage or pollution, and prepare for worsening weather. When sustained winds reach 34 knots bunkering operations will cease and hoses will be drained and disconnected.
   • Seas: For bunkering operations from one vessel to another vessel while at anchor, operations will cease, and hoses drained and disconnected when waves or swells reach 5 ft. The wind and sea conditions criteria have been developed with industry input and are used by operating companies in California. These standards are based on historical observations and experience in handling these vessels under the above prevailing conditions. Heightened safety and precaution should be taken during short interval wave periods.
   • Electrical Strom: When an electrical storm is anticipated in the vicinity of a bunker transfer, shutdown and secure transfer operations. All tank openings and ventilation valves must be closed, including any bypass valve fitted on the tank venting system.*
   • Sheltered Waterway: The aforementioned wind and sea guidelines may not be applicable when a receiving vessel is being bunkered at a wharf or pier in a sheltered waterway. The criteria for securing a bunkering operation in these types of locations would be dependent upon adverse movement of either the receiving vessel or delivering vessel caused by the prevailing wind or sea conditions.
   • Tug Availability: During bunkering operations with the potential to have adverse weather conditions involving vessels at anchor, at least one tug will remain ready to render assistance during the entire bunkering operation. The attending tug(s) must have

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sufficient horsepower to maneuver and control at least the delivering vessel involved in the bunkering operation under all conditions.

5. **Ongoing Compliance and Continual Improvement**
   a. **Drills and Exercises:**

   Equipment deployment drills shall be conducted twice a year by each bunker delivery company in each port. These drills shall be conducted in an environment and under conditions similar to those that would be encountered during an actual oil transfers operation.

   - The ability to deploy oil spill boom shall be drilled to demonstrate proficiency to the Administrator.
   - At least one of these drills will be monitored by OSPR staff, and any documentation generated, including the list of the crew participating in the drill, will be submitted to OSPR. OSPR’s Drills and Exercises Unit must be contacted in advance to schedule these monitored equipment deployment drills.
   - If oil spill boom has been successfully deployed during a transfer operation, this may be counted toward the twice a year equipment deployment requirement. Any relevant documentation generated, including the list of the crew participating in the deployment, will be submitted to OSPR.
   - Vessel transfer units that utilize the services of an OSRO for standby booming, that have been rated to deploy the containment equipment, are not required to meet the twice yearly equipment deployment drills.
   - In addition to these scheduled equipment deployment drills, the Administrator may also require the successful completion of an announced or unannounced equipment deployment drill.

   The vessel owner/operator shall maintain adequate records of drills and exercises, for a period of at least three years, to include records of any off-vessel drills and exercises (i.e., drills and exercise not held aboard the vessel) of the spill response organization and resources identified in the contingency plan. These records shall be maintained at the United States location of either the Qualified Individual or the vessel owner/operator. Contingency plans should indicate the location of these records. All exercises conducted aboard the vessel shall be documented in the vessel’s log.

   When the owner/operator possess like boom deployment systems on their vessels, it is adequate to run a drill on one system, as a representative of the entire company.

   b. **Inspections and Monitoring:**

   The OSPR Administrator should carry out an inspection program which shall include the following:

   - The Administrator shall conduct a system safety inspection of each delivery vessel engaged in transfer operations in the marine waters of California. Such an

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inspection should determine whether the vessel is in compliance with equipment, procedures, and other requirements as specified in this Plan.

- Monitoring transfer operations at the transfer site, including monitoring pre-booming requirements.
- Additionally, twice a year equipment deployment drills shall be conducted by the bunker delivery companies in each port to meet the booming requirements.
- The bunker company has successfully demonstrated to the Administrator their ability to deploy and maneuver boom through deployment drills demonstrating the following: sufficient boom, trained personnel and equipment, maintained in a stand-by condition at the point of transfer, such that at least 1200 feet of boom, or an amount sufficient to meet the containment requirements, whichever is greater, can and will be deployed for the most effective containment immediately, but no longer than 30 minutes, after discovery of a spill.

Prior to each transfer operation, the transfer unit shall provide, for the duration of the entire transfer operation, either pre-booming or standby booming if the aforementioned requirements are not met. These standards may not reflect the exigencies of actual spill response. However, these standards must be used to determine the amount of equipment and personnel that must be available, in such cases pre-booming may be required.

c. **Pre-Booming:**
Transfer units must carry or provide at the point of transfer appropriate equipment and supplies for the containment and removal of both persistent oil, and #1 and #2 grade oil spills in water adjacent to the transfer site. For pre-booming, the transfer unit shall deploy boom so as to enclose the water surface area adjacent to the receiving unit which will provide common containment area for:

- Either of the following:
  - The entire receiving unit and the point of transfer; or
  - Those portions of the receiving unit or seawall from which oil may spill into the water.
- Where the hull of the transfer unit or seawall is capable of acting as an effective barrier on the side of the receiving unit, the boom on that side may be deployed so that it provides containment of the receiving unit and the transfer unit or seawall.
- The boom shall be periodically checked and the boom position shall be adjusted as necessary throughout the duration of the transfer; especially during tidal changes and significant wind or wave events, to maintain maximum containment in the event that oil is spilled into the water.