

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

Harbor Safety Committee of the San Francisco Bay Region Thursday, May 10, 2018 Port of San Francisco, Pier 1, Bay Side Conference Room The Embarcadero, San Francisco, CA

Capt. Lynn Korwatch (M), Marine Exchange of the San Francisco Bay Region (Marine Exchange), Chair of the Harbor Safety Committee (HSC); called the meeting to order at 10:03.

Marcus Freeling (A), 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), CA Dungeness Crab Task Force; **Capt. Tony Ceraolo** (M), United States Coast Guard; **Jeff Ferguson** (M), NOAA; **Aaron Golbus** (M), Port of San Francisco; **Scott Grindy** (M), San Francisco Small Craft Harbor; **Ben Huber** (M), Westar Marine Services; **Capt. Thomas Kirsch** (M), Blue and Gold Fleet; **Andrew Marshall** (M), Port of Benicia; **MJR Kevin McCormick** (A), US Army Corps of Engineers; **Jim McGrath** (M), Bay Conservation and Development Commission; **Capt. Ryan McKenney** (A), Chevron Shipping Company; **Chris Peterson** (M), Port of Oakland; **Jeff Robbins** (M), General Steamship Corporation; **Julian Rose** (M), Andeavor; **Jeff Vine** (M), Port of Stockton

The meetings are always open to the public.

Approval of the Minutes-

A motion to accept the minutes of the April 12, 2018 meeting was made and seconded. The minutes were approved without dissent.

Comments by Chair- Capt. Lynn Korwatch

Welcomed the committee members and audience.

Coast Guard Report- Capt. Tony Ceraolo

- Advised that Opening Day on the Bay took place last month. Boating safety is a USCG priority.
- Advised of a 33 foot sailing vessel which ran aground in Pacifica. The four people on board were rescued and salvage is underway. No hazardous material or fuel is present.
- Advised of a successful Deep Draft Vessel Industry Day which took place on April 25th.

Harbor Safety Committee of the SF Bay Region May 10, 2018 Page 1



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- Advised of upcoming USCG personnel changes. Capt. Patrick Nelson will be leaving in June for Michigan to assume a sector command. CDR Jennifer Stockwell will also be departing and will be replaced by CDR Roberto Rivera as head of Prevention.
- LCDR Rebecca Deakin read from the April- 2018 Prevention/Response Report (attached). Three Rule 9 Violation cases were reported which is a concern as the weather warms. Outreach is a priority. Fines are issued for Rule 9 Violations when possible but the specific vessel could not be identified in the April 21st case.
- Capt. Ceraolo thanked CDR Stockwell for her service at Sector San Francisco and wished her all the best as she continues her USCG career on the east coast. Capt. Korwatch also thanked CDR Stockwell.

Army Corps of Engineers Report- MJR Kevin McCormick

- Advised that permanent removal of the sunken barge in San Joaquin Deep Water Channel has been expedited. The contract award is expected by the end of May and work will begin as soon as possible.
- Read from the US Army Corps of Engineers, San Francisco District Report (attached). Debris removal numbers are still slightly above average.
- Jim McGrath advised that the proposed Water Resources Act may have impacts on our region.

Clearing House Report- Marcus Freeling (report attached)

OSPR Report- Mike Coyne

- Advised that Chris Peterson, Port of Oakland is retiring and thanked him for his years of service on the HSC.
- Advised of new HSC appointments: Troy Hosmer, Port of Oakland, has been appointed as primary member representing port authorities. Justin Taschek, Port of Oakland, has been appointed as alternate member representing port authorities. Jared A. Wilkey, Port of Stockton, has been appointed as alternate member representing port authorities. Brandon Chapman, Port of San Francisco, has been appointed as alternate member representing port authorities. Terms end on May 9, 2021. Open HSC positions are announced by email. Capt. Korwatch welcomed the new HSC members to the committee.



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NOAA Report- Jeff Ferguson

- Advised that voluntary speed reductions to reduce the risk of whale strikes will be in effect from May 1st to November 15th. A speed limit of 10 knots is requested for vessels offshore.
- Advised that the NWS La Nina advisory is officially over. Signs point to the possibility of an El Nino next year but it is too early to predict.

State Lands Commission Report- Richard Hernandez (report attached)

 Advised that State Lands will be hosting Prevention First on September 25th and 26th in Long Beach. Many speakers will be featured.

Work Group Reports-

Tug Work Group- Nothing to report

Navigation Work Group- Nothing to report.

Ferry Operations Work Group- Capt. Thomas Kirsch advised that there was nothing to report.

Dredge Issues Work Group- Julian Rose advised that a work group meeting will be scheduled.

PORTS Work Group- Chris Peterson advised that Troy Hosmer will be taking over as work group Chair.

Prevention through People Work Group- Scott Grindy advised that there was nothing to report.

PORTS Report- Marcus Freeling

- Advised that the UP Railroad Bridge wind station is still offline due to bridge electrical issues.
- Advised of connection and excessive data use issues affecting several PORTS IP modems. The current modems in use at PORTS stations use older technology which will have to be upgraded soon to maintain functionality.



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Public Comment-

- Linda Scourtis announced that the yearly HSC Plan Update is being prepared. A vote on the Plan Update is expected at the June HSC meeting.
- Capt. Korwatch introduced Christoph Strobel, new Operations Manager for the San Francisco Marine Exchange.
- Capt. Korwatch announced that a Maritime Day ceremony will be held on May 22nd at the International Maritime Center in Oakland.
- Sean Kelley, USCG, advised that a VTS whale advisory will be issued for voluntary speed reduction. A whistle salute is being planned for Maritime Day.
- Julian Rose advised that Andeavor has been purchased by Marathon and will be undergoing another name change.

Old Business-

• Capt. Ceraolo advised of the USCG focus on preventing accidental death in the maritime domain through emphasis on safety and accident reduction. Outreach to the community is ongoing.

New Business-

• Capt. Korwatch advised that the August HSC meeting has been canceled.

Next Meeting-

1000-1200, June 14, 2018 Port of Oakland, Exhibit Room 530 Water Street, Oakland, CA

Adjournment-

A motion to adjourn was made and seconded. The motion passed without dissent and the meeting adjourned at 10:32.

Respectfully submitted:

Capt. Lynn Korwatch

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PREVENTION / RESPONSE - SAN FRANCISCO HARBOI April 2018	R SAFETY STAT	ISTICS	
PORT SAFETY CATEGORIES*	Apr-2018	Apr-2017	**3yr Avg
Total Number of Port State Control Detentions:	0	0	0.50
SOLAS (0), STCW (0), MARPOL (0), ISM (0), ISPS (0)			
Total Number of COTP Orders:	6	2	3.17
Navigation Safety (5), Port Safety & Security (1), ANOA (0)			
Marine Casualties (reportable CG 2692) within SF Bay:	11	17	9.36
Allision (1), Collision (0), Fire (0), Capsize (0), Grounding (0), Sinking (0)			
Steering (1), Propulsion (6), Personnel (2), Other (0), Power (1)			
Total Number of (routine) Navigation Safety issues/Letters of Deviation:	2	0	2.58
Radar (1), Gyro (0), Steering (0), Echo Sounder (0), AIS (1)			
ARPA (0), Speed Log (0), R.C. (0), Other (0)			
Reported or Verified "Rule 9" or other Navigational Rule Violations:	3	0	0.50
Significant Waterway events/Navigation related Cases:	0	1	0.36
Total Port Safety (PS) Cases opened	22	20	16.47
MARINE POLLUTION RESPONSE		-	
Pollution Discharge Sources (Vessels)	Apr-2018	Apr-2017	**3yr Avg
U.S. Commercial Vessels	0	2	0.72
Foreign Freight Vessels	0	0	0.08
Public Vessels	2	1	0.56
Commercial Fishing Vessels	0	0	0.31
Recreational Vessels	5	2	2.72
Pollution Discharge Sources (Facilities)			
Regulated Waterfront Facilities	0	0	0.14
Regulated Waterfront Facilities - Fuel Transfer	0	0	0.00
Other Land Sources	5	0	0.69
Mystery Spills - Unknown Sources	4	6	3.72
Number of Pollution Incidents within San Francisco Bay			
Spills < 10 gallons	2	4	3.67
Spills 10 - 100 gallons	0	1	1.03
Spills 100 - 1000 gallons	0	0	0.14
Spills > 1000 gallons	0	0	0.00
Spills - Unknown Size	14	6	4.19
Total Pollution Incidents	16	11	9.03
Oil Discharge/Hazardous Materials Release Volumes by Spill Size			
Estimated spill amount from U.S. Commercial Vessels	0.00	6.00	14.55
Estimated spill amount from Foreign Freight Vessels	0.00	0.00	8.50
Estimated spill amount from Public Vessels	1.00	15.00	2.04
Estimated spill amount from Commercial Fishing Vessels	0.00	0.00	1.18
Estimated spill amount from Recreational Vessels	1.00	7.00	39.99
Estimated spill amount from Regulated Waterfront Facilities	0.00	0.00	0.17
Estimated spill amount from Regulated Waterfront Facilities - Fuel Transfer	0.00	0.00	0.00
Estimated spill amount from Other Land Sources	0.00	0.00	1.98
Estimated spill amount from Unknown Sources (Mystery Sheens)	unk	unk	0.00
Total Oil Discharge and/or Hazardous Materials Release (Gallons)	2.00	28.00	68.40
Penalty Actions			
Civil Penalty Cases	0	0	0.00
Notice of Violations	0	0	0.47
Letters of Warning	2	3	2.44
Total Penalty Actions	2	3	2.92
* NOTE: Values represent all cases within the HSC jurisdiction during the period. Significant cases are	detailed in the nam	ative.	

SIGNIFICANT PORT SAFETY AND SECURITY CASES (APR 2018) MARINE CASUALTIES

Loss of propulsion (03 April 2018): A U.S. flag small passenger vessel experienced a loss of propulsion while mooring in San Francisco. The vessel offloaded passengers and a technician attended the vessel to witness satisfactory operation of the system. LOP was not attributed to fuel switching. Case closed.

Loss of power (04 April 2018): A U.S. flag container vessel experienced a brief loss of power while transiting North West of the Bay Bridge. The vessel regained power and was escorted to Anchorage 9. Loss of power was attributed to human error. Coast Guard attended the vessel and witnessed the satisfactory operation of the system. Case closed.

Loss of propulsion (11 April 2018): A foreign flag container vessel experienced a loss of propulsion while departing the port. A COTP Order was issued requiring the vessel to remain in at berth. Class and Coast Guard attended the vessel and witnessed the satisfactory operation of the vessel's main propulsion system and the COTP Order was lifted. LOP was not attributed to fuel switching. Case closed.

Allision (19 April 2018): A U.S. flag tank barge experienced an allision with North Channel Buoy 1. Coast Guard attended the barge and verified no damage. Case closed.

Loss of propulsion (22 April 2018): A foreign flag container vessel experienced a loss of propulsion while departing the port. A COTP Order was issued requiring the vessel to remain at berth. LOP was attributed to a failure in the start air system. Class and Coast Guard attended the vessel and witnessed the satisfactory operation of the vessel's main propulsion system and the COTP Order was lifted. Case closed.

Loss of propulsion (23 April 2018): A foreign flag tank vessel experienced a loss of propulsion while anchoring in Anchorage 9. A COTP Order was issued requiring the vessel remain at Anchorage 9. Adjustments were made to the main engine per manufacturer. Class and Coast Guard attended the vessel and witnessed the satisfactory operation of the vessel's main propulsion system and the COTP order was lifted. LOP was not attributed to fuel switching. Case closed.

Loss of propulsion (26 April 2018): A U.S. flag small passenger vessel experienced a loss of propulsion while transiting in San Francisco Bay due to a clogged fuel filter. A CG-835 No sail was issued. Coast Guard attended the vessel and witnessed proper operation of the vessel's propulsion system. Case closed.

GENERAL SAFETY CASES

Rule 9 Violation (09 April 2018): A foreign flag vehicle carrier was transiting inbound to Richmond Inner Harbor when a sailing vessel crossed within 100 feet of her bow. The pilot sounded a danger whistle and stopped the vessel to avoid collision. Case pends.

Rule 9 Violation (14 April 2018): A foreign flag tank vessel was transiting out bound San Francisco Bay when a sailing vessel crossed her bow. The pilot took evasive action to avoid collision. Case closed.

Rule 9 Violation, (21 April 2018): A foreign flag bulk carrier came across a recreational vessel anchored in the vicinity of Light 33 in the San Joaquin River that refused to move despite multiple attempts to hail the vessel and the use of sound signals. Case closed.

NAVIGATION SAFETY

Letter of Deviation, (21 April 2018): A foreign flag tank vessel was issued an inbound LOD for inoperable X-Band Radar. Vessel repaired X-Band Radar and provided a copy of the technician report to Coast Guard. LOD was lifted. Case closed.

Letter of Deviation, (23 April 2018): A foreign flag bulk carrier was issued an inbound LOD for an inoperable AIS. Vessel repaired the AIS and provided a copy of the technician report to Coast Guard. LOD was lifted. Case closed.

SIGNIFICANT INCIDENT MANAGEMENT DIVISION CASES

Letter of Warning, (04APR18): A 37' U.S. flag recreational vessel discharged unknown amount of gasoline in San Leandro Marina. Boom was deployed and the owner removed the gasoline from vessel. An LOW was issued to the owner. Case closed.

Letter of Warning, (27APR18): A 57' U.S. flag recreational vessel discharged 1 gallon of diesel into Ballena Isle Marina Harbor. The source was secured and boom was deployed around the vessel. An LOW was issued to the owner. Case closed.

Harbor Safety Committee Of the San Francisco Bay Region

Report of the U.S. Army Corps of Engineers, San Francisco District May 10, 2018

1. CORPS O&M DREDGING PROGRAM

The following report covers the upcoming FY 2018 dredging program for San Francisco Bay. This program is subject to change based on a number of variables including final FY 2018 appropriations and Corps Work Plan. Please refer to the Local Notice to Mariner for details of dredge operations.

FY 2018 DREDGING

- **a. SF Main Ship Channel** Estimated start mid-May 2018, estimated completion early June 2018, by contracted hopper.
- **b.** Richmond Inner Harbor –FY 18 dredging cycle estimated to commence early August 2018 with completion in November. Work will be contracted clamshell.
- c. Richmond Outer Harbor (and Richmond Long Wharf) –In alignment with last year's proposal to alternate Hopper dredging, planned dredging for Richmond Outer will proceed with Essayons.
- **d.** Oakland Harbor 2017 dredge cycle initiated in mid-August 2017. Significantly larger than expected volumes are requiring additional dredging. Initial estimates indicate approximately 1000kcy resulting in likely need to continue dredging through March 2018 to complete the 2017 dredge cycle. 2018 dredge cycle has a planned start of early August with planned completion in November.
- e. Redwood City Harbor 2018 work plan funding will determine award and quantities.
- **f.** San Pablo Bay (Pinole Shoal) –In alignment with last year's proposal to alternate Gov't Hopper dredging Pinole will be deferred in 2018.
- **g.** Suisun Bay Channel (and New York Slough) –2018 Clamshell award is expected to initiate dredging in late August and to complete in late October.

2. DEBRIS REMOVAL – Debris removal for April 2018 was 76.5 tons. Raccoon: 26 tons; Dillard: 35.5 tons, including 2 abandoned vessels; other boats: 15 tons, including 8 abandoned vessels. Average for April from 2008 to 2017 is 69.5 tons (Range: 26-142.5 tons).

MONTH	RACCOON	DILLARD	MISC	TOTAL
2018	TONS	TONS	TONS	TONS
JAN	45	0	50	95
FEB	20	18	50	88
MAR	20	46.5	17	83.5
APR	26	35.5	15	76.5
MAY	0	0	0	0
JUN	0	0	0	0
JUL	0	0	0	0
AUG	0	0	0	0
SEP	0	0	0	0
ОСТ	0	0	0	0
NOV	0	0	0	0
DEC	0	0	0	0

BASEYARD DEBRIS COLLECTION TOTALS:

YR TOTAL	
343	

3. UNDERWAY OR UPCOMING HARBOR IMPROVEMENTS

None to report.

4. EMERGENCY (URGENT & COMPELLING) DREDGING

None to report.

5. OTHER WORK

San Francisco Bay to Stockton – The study is now being conducted by the Wilmington District to more efficiently match the study with available resources. Funding was allocated in the FY17 work plan. The Tentatively Selected Plan (TSP) milestone for Phase I (Western Reach) of the project was held on 29 June 2016 utilizing FY14 carryover funds. The recommended plan is to deepen the Phase I reach of the project from a depth of -35 feet to -38 feet MLLW. The final report is scheduled to be approved in February 2019. Additional funding will be dependent upon FY18 work plan funding.

HYDROGRAPHIC SURVEY UPDATE

Address of Corps' web site for completed hydrographic surveys:

http://www.spn.usace.army.mil/Missions/Surveys,StudiesStrategy/HydroSurvey.aspx

The following surveys are posted:

Alameda Point Navigation Chanel: Condition survey of November 7, 2017. Berkeley Marina (Entrance Channel): Condition survey of November 2, 2017. Islais Creek Channel: Condition survey of November 17, 2017. Larkspur Ferry Channel: Condition survey of November 6, 2017. Main Ship Channel: Condition survey of April 5, 2018. Mare Island Strait: Condition survey of September 24, 2014. Marinship Channel (Richardson Bay): Condition survey of December 7, 2017. Napa River: Condition survey of May 4-9, 2017. Northship Channel: Condition survey of October 27, 2017. Oakland Entrance Channel (Reach 1A-1C): Post-dredge surveys of January 17 & 19, 2018. Oakland Inner Harbor (Reach 2): Post-dredge survey of October 10, 2017 & November 2, 2017. Oakland Inner Harbor (Reach 3A-3C): Post-dredge survey of February 22, 2018. Oakland Inner Harbor (Reach 4): Post-dredge survey of January 17, 2018. Oakland Inner Harbor (Reach 5): Post-dredge survey of January 5, 2018. Oakland Inner Harbor (Reach 6): Post-dredge survey of December 21, 2017. Oakland Outer Harbor (Reach 7-8): Post-dredge surveys of September 2 & 11, 2017. Oakland Outer Harbor (Reach 9): Condition survey of March 28, 2018. Oakland Outer Harbor (Reach 10): Condition survey of April 16, 2018. Petaluma River (Across-the-Flats): Condition survey of September 12-14, 2014. Petaluma River (Main Channel): Condition survey of December 12-13, 2017. Petaluma River (Extended Channel): Condition survey of March 19-26, 2018. Pinole Shoal Channel: Condition survey of April 4-10, 2018. Redwood City Harbor: Condition survey of February 7-8, 2018. Richmond Inner Harbor: Condition survey of May 1, 2018. Richmond Inner Harbor (Santa Fe Channel): Condition survey of December 20, 2016. Richmond Outer Harbor (Longwharf): Condition survey of January 25, 2018. Richmond Outer Harbor (Southampton Shoal): Condition survey of January 25, 2018. Sacramento River Deep Water Ship Channel: Condition survey of February 25-28, 2018. San Bruno Shoal: Condition survey of March 27, 2017. San Leandro Marina (and Channel): Condition survey of March 30 and April 1, 2015. San Rafael (Across-the-Flats): Condition survey of October 30-31, 2017. San Rafael (Creek): Condition survey of October 30, 2017. Stockton Ship Channel: Condition survey of December 27-28, 2017, January 9-11, 2018 and February 13-15 2018.

Suisun Bay Channel: Post-dredge survey of October 10 & 20, 2017.Suisun Bay Channel (Bullshead Reach): Condition survey of April 19, 2017.Suisun Bay Channel (New York Slough): Pre-dredge survey of July 13-14, 2017.

Disposal Site Condition Surveys:

SF-08 (Main Ship Channel Disposal Site): Condition survey of May 11, 2017.
SF-09 (Carquinez): Condition survey of April 11, 2018.
SF-10 (San Pablo Bay): Condition survey of April 11, 2018.
SF-11 (Alcatraz Island): Condition survey of March 6, 2018 and April 2, 2018.
SF-16 (Suisun Bay Disposal Site): Condition survey of September 1, 2016.
SF-17 (Ocean Beach Disposal Site): Condition survey of May 11, 2017.

Requested Surveys:

Pre-dredge surveys are scheduled to occur May-October for all of San Francisco District's in-bay projects which are planned to be dredged in FY18.

NEW WEB ADDRESS – USACE WORK PLAN:

http://www.usace.army.mil/Missions/Civil-Works/Budget/

O&M DREDGING PLAN FOR FY18*																		
10-May-18																		
Project	District		NOV FY 2017		JAN	FEB	MAR		MAY FY 2018		JUL	AUG	SEP		NOV DEC FY 2019	Estimated CY	Planned Placement Site	Notes
SF Main Ship Channel	SPN/NWP															350kcy	OBDS/ SF-8	Estimated performance period May 15 - May 30 In alignment with last years
Richmond Outer Harbor	SPN/NWP						Essay	ons								300kcy		In alignment with last years proposal to alternate Hopper Dredging, Richmond Outer will utilize the Essayons
Richmond Inner Harbor	SPN									\diamond	•	////	////	////		350kcy	DODS/upland	Estimated performance period Aug 10- Nov 10
Oakland Harbor	SPN							**		٠					/////	700kcy	DODS/upland	Estimated performance period Aug 1- Nov 30
Redwood City Harbor	SPN									<	•	2				250kcy	SF-11	Estimated performance period Aug 17- Nov 3
Pinole Shoal	SPN/NWP		SAYON	IS														In alignment with last years proposal to alternate Hopper Dredging, Pinole will be deferred
Suisun Bay Channel	SPN									\diamond	٠	7///				175kcy	SF-16	Estimated performance period Aug 25- Oct 20
Sacramento River (30 Ft)	SPN									$\diamond \blacklozenge$	E	////				100kcy	Various Upland	
San Joaquin, Port of Stockton	SPN				* *											250kcy	Various Upland	Estimated performance period 22 July - Nov 30
	Ongoing Co New SPN Co West Coast Government	ontract Hoppe	r Contr	act									Bid Op	pening		Environmenta Contract Awa		
Program execution is based on the FY18 President's Budget, Workplan and Federal Standard plan for each project. Date of Update: 4/3/2018																		

** Window Extension.



HARBOR SAFETY COMMITTEE MONTHLY REPORT - APRIL COMPARISON

VESSEL TRANSFERS

	Total Transfers	Total Ves Monitore		Transfers entage	
APRIL 1 - 30, 2017	208	91	43.7	75	
APRIL 1 - 30, 2018	221	83	37.5	56	
CRUDE OIL / PRODU	CT TOTALS				
	Crude Oil (D)	Crude Oil (L)	Overall Product (D)	Overall Product (L)	GRAND TOTAL
APRIL 1 - 30, 2017	14,204,600		17,864,870	7,441,386	25,306,256
APRIL 1 - 30, 2018	16,567,500	0	20,703,304	8,318,574	29,021,878
OIL SPILL TOTAL					
APRIL 1 - 30, 2017		TERMINAL 0	VESSEL	Total0	Gallons Spilled
APRIL 1 - 30, 2017		0	0	0	
AFRIL 1 - 30, 2010		0	U	v	

Disclaimer:

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



Harbor Safety Committee of the San Francisco Bay Region Clearing House

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

San Francisco Clearinghouse Report

May 10, 2018

- In April the clearinghouse did not contact OSPR regarding any possible escort violations.
- In April the clearinghouse did not receive any notifications of vessels arriving at the Pilot Station without escort paperwork.
- The clearinghouse has contacted OSPR a total of 1 time in 2018 regarding possible escort violations. The clearinghouse did not contact OSPR in 2017 about possible escort violations. The clearinghouse contacted OSPR 1 time in 2016 about a possible escort violation. The clearinghouse contacted OSPR 3 times in 2015 about possible escort violations. The clearinghouse contacted OSPR 5 times regarding possible escort violations in 2014. The clearinghouse contacted OSPR 1 time in 2013. The clearinghouse contacted OSPR 3 times in 2012 regarding possible escort violations, 3 times in 2011, 6 times in 2010, 8 time 2009; 4 times 2008; 9 times in 2007; 9 times in 2002; 6 times in 2001; 5 times in 2000.
- In April there were 105 tank vessel arrivals; 10 ATB's, 11 Chemical Tankers, 18 Chemical/Oil Tankers, 34 Crude Oil Tankers, 1 LPG, 19 Product Tankers, and 12 Tugs with Barges.
- In April there were 298 total vessel arrivals.

San Francisco Bay Clearinghouse Report For April 2018

San Francisco Bay Region Totals

	<u>2018</u>		<u>2017</u>	
Tanker arrivals to San Francisco Bay	83		69	
ATB arrivals	10		12	
Barge arrivals to San Francisco Bay	12		16	
Total Tanker and Barge Arrivals	105		97	
Tank ship movements & escorted barge movements	320		298	
Tank ship movements	166	51.88%	170	57.05%
Escorted tank ship movements	134	41.88%	124	41.61%
Unescorted tank ship movements	32	10.00%	46	15.44%
Tank barge movements	154	48.13%	128	42.95%
Escorted tank barge movements	17	5.31%	29	9.73%
Unescorted tank barge movements	137	42.81%	99	33.22%

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

Escorts reported to OSPR						0		0			
Movements by Zone	Zone 1	%	Zone 2	%	Zone 4	%	Zone 6	%	Total	%	
Total movements	205		315		0		129		649		
Unescorted movements	96	46.83%	165	52.38%	0	0.00%	69	53.49%	330	50.85%	
Tank ships	86	41.95%	134	42.54%	0	0.00%	63	48.84%	283	43.61%	
Tank barges	10	4.88%	31	9.84%	0	0.00%	6	4.65%	47	7.24%	
Escorted movements	109	53.17%	150	47.62%	0	0.00%	60	46.51%	319	49.15%	
Tank ships	95	46.34%	133	42.22%	0	0.00%	58	44.96%	286	44.07%	
Tank barges	14	6.83%	17	5.40%	0	0.00%	2	1.55%	33	5.08%	

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 2018

San Francisco Bay Region Totals

	<u>2018</u>		<u>2017</u>	
Tanker arrivals to San Francisco Bay	299		797	
ATB arrivals	44		146	
Barge arrivals to San Francisco Bay	52		150	
Total Tanker and Barge Arrivals	351		1,093	
Tank ship movements & escorted barge movements	1,245		3,562	
Tank ship movements	667	53.57%	2,075	58.25%
Escorted tank ship movements	520	41.77%	1,618	45.42%
Unescorted tank ship movements	147	11.81%	457	12.83%
Tank barge movements	578	46.43%	1,487	41.75%
Escorted tank barge movements	60	4.82%	218	6.12%
Unescorted tank barge movements	518	41.61%	1,269	35.63%

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

Escorts reported to OSPR

0

0

Movements by Zone	Zone 1	%	Zone 2	%	Zone 4	%	Zone 6	%	Total	%
Total movements	781		1,209		0		497		2,487	
Unescorted movements	378	48.40%	641	53.02%	0	0.00%	246	49.50%	1,265	50.86%
Tank ships	311	39.82%	499	41.27%	0	0.00%	227	45.67%	1,037	41.70%
Tank barges	67	8.58%	142	11.75%	0	0.00%	19	3.82%	228	9.17%
Escorted movements	403	51.60%	568	46.98%	0	0.00%	251	50.50%	1,222	49.14%
Tank ships	367	46.99%	509	42.10%	0	0.00%	233	46.88%	1,109	44.59%
Tank barges	36	4.61%	59	4.88%	0	0.00%	18	3.62%	113	4.54%

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.