

SAN FRANCISCO BAR PILOTS

OPERATIONS GUIDELINES

FOR THE MOVEMENT OF VESSELS

ON SAN FRANCISCO BAY AND TRIBUTARIES

January, 2005

TABLE OF CONTENTS

	Page
ORDERING A PILOT	
Information Requested When Ordering a Pilot.....	4
Recommendations for Tug/Thruster Requirements	5
SAN FRANCISCO BAR AND BAY	
General Information	6
Hazardous Materials	6
Deep Draft Vessels	6
Docks and Facilities:	
Amorco.....	10
Tesoro Tug and Docking Requirements (Addendum 3)	24
Anchorage 23	11
Avon/Martinez Terminal	11
Benicia, Port of	11
Oakland Outer and Inner Harbor	7
Checklist for Bunkering OOH (Addendum 2).....	23
Ozol	10
Pinole Shoal Channel	10
Pittsburg/Antioch Terminals	12
Redwood City.....	8
Richmond Chevron Long Wharf.....	9
RLW Minimum Tug Requirements (Addendum 1-A)	17
RLW Guidelines for 188,000 DWT Tankers (Addendum 1-B)	18
RLW Vessel Separation Guidelines (Addendum 1-C).....	19
RLW Vessel Pre-Arrival Communications (Addendum 1-D).....	21

Richmond Inner Harbor.....	9
Richmond Terminal 4.....	10
Rodeo	10
San Francisco: Islais Creek	6
San Francisco: Piers 94 and 96	7
Selby.....	10
Union Pacific Railroad Bridge	11
Valero.....	12

SACRAMENTO AND STOCKTON

Transit Drafts	12
Size Limitations	12
Air Draft.....	12
Daylight Transits.....	13
Fog	13
Port of Sacramento Transit Drafts	14
Port of Stockton Transit Drafts	15

TUGS AND THRUSTERS

Recommendations for Tug/Thruster Requirements.....	5
RLW Minimum Tug Requirements (Addendum 1-A)	17
Tesoro Minimum Tug Requirements (Addendum 3)	24
Flat Tow Guidelines (Addendum 4).....	25

To Our Valued Customers:

The members of the San Francisco Bar Pilots are charged under the laws of the State of California with providing a safe and efficient pilot service. To accomplish these goals, we have identified certain operational procedures that we ask that you assist us in adhering to when scheduling our services. For all movements we request that you provide the following information when ordering a pilot:

1. date and time the pilot will be required; for arrivals the request for a pilot should be made a minimum of 24 hours in advance with an update of ETA 12 and 4 hrs. prior to arrival. For river transits, the request should be made a minimum of 8 hours in advance. For all other sailings, the request should be made a minimum of 4 hours in advance.
2. vessel's arrival draft, and for vessels going above UPRRB, fresh water draft and air draft;
3. berth(s) and side to;
4. the name of the company and the tug boats that will be supplied;
5. length, breadth and air draft of vessel; any reference to PANAMAX Class means a vessel of about 750' loa and 106' beam (a vessel's trim can significantly affect the air draft and masters/agents must be alert to this);
6. availability and HP of an operational bow thruster; and
7. any special requirements or problems affecting the vessel
8. Flat tows/dead ship tows must be provided with a master or person in charge and riding crew. The San Francisco Bar Pilots will fax a copy of flat tow policy to anyone contracting or planning a flat tow as soon as the dispatcher or Operations Pilot receives an order or a request for information.
9. Pilot ladders must comply with SOLAS regulations.
10. The Harbors and Navigation Code, Division 5, section 1198, gives every vessel, and its owner, operator and/or charterer a choice of options for protecting pilots from liability. Pilots are required to have available "trip" insurance for purchase by those hiring a pilot. The trip insurance protects the pilots from liability that may be incurred in connection with the provision of pilotage service. Trip insurance is available from the SFBP upon advance written request. Alternatively, if a vessel and its owner, operator and/or charterer do not wish to purchase the trip insurance, then by law they are deemed to have agreed to defend and indemnify the pilot hired, as well as the SFBP and those associated with it, from all liabilities that may arise in connection with the provision of pilotage. Protecting the pilots from liability by choosing from the options described herein is required both by statute, and as a contractual condition.

IMPORTANT: READ CAREFULLY

These guidelines are intended for planning purposes only. They have been developed to assist dispatchers and vessel agents in planning for local vessel movements. These guidelines are not intended, nor should they be construed, as a representation of minimum or maximum requirements or a warranty that, if the recommendations outlined in the guidelines are met, an operation can be successfully performed. **IN ANY EVENT, NO REPRESENTATION OR WARRANTIES OF ANY SORT ARE MADE OR INTENDED BY THE SAN FRANCISCO BAR PILOTS OR ANY OF ITS MEMBER PILOTS BY THESE GUIDELINES NOR UNDER ANY ARRANGEMENTS THAT MAY BE AGREED TO.**

In each instance, the individual pilot who is assigned to the vessel will determine whether the planned operation can be successfully completed with the resources allocated. Please note that actual conditions may preclude the performance of the movement as planned. For those reasons, it is the vessel agent's responsibility to contact the

pilot office, the operations pilots and the pilot assigned to the vessel to determine whether in his or her opinion the resources provided will be satisfactory and also to be prepared to assist the pilot with additional resources if needed.

In addition, each vessel has its own peculiar handling characteristics. Some vessels, because of their handling limitations, will need additional tugs or other resources, and in some instances, will not be able to be moved under all conditions. The vessel agent should provide complete details to the pilot office and to the pilot assigned of the vessel's handling characteristics in order to assist both in planning and the performance of actual piloting operations.

Recommendations for tug/thruster requirements.

In addition to the tug recommendations noted in these guidelines, some terminals define power requirements for tugboats being used to assist vessels moving to or from their facilities.

These guidelines are based on typical fair weather conditions. There may be special circumstances, including conditions of tide, current, wind and weather or other unusual operating parameters when the Operations Pilot or assigned pilot may require additional tugs or particular technology.

In order not to be unduly inflexible regarding tug requirements, it is impossible to set rigid rules in most cases. Previous experience and practices should be one of the guidelines. The Operations Pilot should be consulted in the cases where the draft is more than usual, in cases of unusual or severe weather or where strong tidal current may adversely affect the operation.

Tugs within a class are not necessarily the same and, occasionally, specific tugs may be requested due to their particular design, type of propulsion, deck machinery or number of propellers. Bow and stern thrusters should be considered an aid and do not necessarily replace a tug whether it is due to lack of horsepower or other inherent limitations.

We have set forth a number of recommendations that you should employ for long term and general planning purposes. Under most circumstances, any problems with implementing these recommendations can be resolved by prior consultation with the Operations Pilot. However, since the pilot to whom the vessel is assigned is responsible to advise the master of the vessel and must evaluate each move considering the circumstances at a particular time, it may be necessary for the Operations Pilot to refer you to that pilot or another familiar with the area to respond to your request. In any event, you should notify the Operations Pilot of any potential problems as soon as possible to avoid misunderstandings or delays. The final determination as to the adequacy of the tugs and bow thruster is the responsibility of the pilot assigned to the job.

Tugs are listed in classes according to “bollard pull”, as certified by ABS or other appropriate authority. Bollard pull is used rather than horsepower because it is the only meaningful way to rate a tug’s efficiency. Additionally, the tug’s design type, such as tractor, twin screw or single screw, and the addition of kort nozzles and flanking rudders has a definite effect on the utility and efficiency of a particular tug. Use of any tug that has not been rated must be cleared by the Operations Pilot or the assigned pilot.

Tug Class Ratings:

Class	Minimum Bollard Pull [in Pounds]	
	Ahead	Astern
A	85,000	55,000
B	60,000	45,000
C	35,000	20,000
D	20,000	10,000

[Designator for tractor tug = At]

Thrusters must meet the following minimum requirement of **available** horsepower to substitute for a tug:

Vessel’s LOA in feet (meters)	Available Horsepower
more than 900’ (274.3 m.)	2,500

More than 30 ft. AA

- b. Vessels with a draft of 30-34 ft. or greater than 600' LOA should avoid arriving at the berth within one (1) hour of maximum ebb current.

Vessels with a draft of greater than 34 ft. or greater than 700' LOA should arrive at the berth within one (1) hour of slack water.

Large, deep draft vessels that cannot meet these arrival time requirements may require a tractor tug. Consult with the Operations Pilot.

- c. Any vessel wishing to pass another berthed vessel or any vessel wanting to berth P/S to MUST contact the Operations Pilot with all the pertinent information in a timely manner (24 hours pre-arrival). Once this information is received a determination will be made as to the feasibility, and if approved, arrival/departure times and tug requirements will be given at that time.
- d. Vessels departing Berths 80 A-B and 92 may eliminate the smaller tug if they have an adequate bow thruster, as set forth in these guidelines.
- e. Vessels arriving S/S to at Berths A-B, with BT, ST and Becker Rudder with a draft of < 27' may eliminate the smaller tug.

5. **San Francisco Bay, Piers 94 and 96**

- a. Vessels with draft of 35' and greater will require 2 tractor tugs on arrival.
- b. Consult with the Operations Pilot regarding tug requirements on all other vessels.

6. **Oakland Inner and Outer Harbor**

a. **For Vessels Transiting Oakland Outer Harbor and Oakland Inner Harbor:**

Vessel's LOA in Feet (Meters)	Draft in Feet (Meters)	Tugs
More than 1000' (304 m.)	All	AtAt plus BT
900'-1000' (274.3 m.-304 m.)	All	AA <u>or</u> AB plus BT
750' - 900' (228.6 m. - 274.3 m.)	more than 35' (10.67 m.)	AB <u>or</u> BB plus BT
750' - 900' (228.6 m. - 274.3 m.)	less than 35' (10.67 m.)	BB <u>or</u> BC plus BT
550' - 750' (167.6 m. - 228.6 m.)	more than 32' (9.75 m.)	BC <u>or</u> B plus BT
550' - 750' (167.6 m. - 228.6 m.)	less than 32' (9.75 m.)	CC <u>or</u> C plus BT
less than 550' (167.6 m.)	All	CD <u>or</u> D plus B

- b. Vessels over 900' turning at Oakland Inner Harbor Turning Basin must have two tugs in addition to the bow thruster. One of these tugs must be a Class A tractor.
- c. Vessels docking or undocking without turning may eliminate the smaller tug if they have a adequate bow thruster meeting the minimum requirements set forth in these guidelines, with the following exceptions:
 - Vessels docking/undocking at berths 35-37

- During periods of adverse weather conditions, such as strong winds, storm fronts and rain squalls.
- d. Vessels with bow and stern thrusters may, in some cases, dock/undock without tugs if the thrusters meet the minimum requirements set below, except vessels over 900' with bow and stern thrusters will require 1 Class A tug for docking.
- e. Vessels under 600' undocking without turning may, under certain circumstances, use one tug or bow thruster (meeting minimum requirements) **only** after consulting the Operations Pilot or pilot assigned to the job.
- f. Vessels wishing to dock starboard side to berths 35/37 or port side to berths 55/56 should consult the Operations Pilot for tug requirements. Vessels should be docked with minimal current. A tractor tug may be required at times other than slack water.
- g. Maximum current/UKC guidelines for deep draft vessels entering/departing Oakland Outer Harbor with an LOA over 900':

UKC	<u>INBOUND</u>		<u>OUTBOUND</u>
	FLOOD	EBB	FLOOD or EBB
2'0"1.0 K	0.75 K	2.0 K	
2'6"1.25 K	1.0 K	2.5 K	
3'0"1.5 K	1.25 K	3.0 K	
3'6"2.0 K	1.5 K	---K	
4'0"2.5 K*	2.0 K*	---K	

* Maximum current for any inbound vessel (to Oakland Outer Harbor) over 900' LOA, with a draft of 38' or more.

- h. See Addendum 2 for USCG recommendations for bunkering operations at berths 35/37.

7. **Redwood City**

Tug requirements for vessels arriving and departing Redwood City are as follows:

Vessels up to 600' LOA:	Draft: Less than 30 ft.	CC
	More than 30 ft.	BC
Vessels over 600' LOA:	Draft: Less than 30 ft.	BC
	More than 30 ft.	AB
Vessels over 700' LOA:	Draft: Less than 30 ft.	AtB
	More than 30 ft.	AtA
Vessels over 750' LOA:	All Drafts	(2) At

- a. Maximum drafts for Redwood City will be calculated on the height of tide one hour on either side of high water at Redwood Creek Marker #8.
- b. Weather permitting, vessels departing without turning may eliminate the smaller tug if they have an adequate bow thruster as set forth in these guidelines.
- c. Vessels over 700' LOA may be required to transit Redwood Creek during daylight hours only regardless of draft.

8. **Richmond Chevron Long Wharf (Chevron Long Wharf Guidelines)**

- a. It is recommended that vessels docked port side to at Berth One, 40K DWT and above, and vessels docked port side to at Berths 2, 3 and 4, 80K DWT and above, sail on flood currents only. (Chevron Long Wharf recommendation)
- b. For 188,000 DWT tankers, see Addendum 1-B.
- c. Chevron Long Wharf minimum tug requirements will be applied to all routine ship movements. See Addendum 1A for Chevron [RLW] minimum tug requirements.
- d. See Addendum 1 for Recommended Guidelines for Separating Arrivals and Departures at Richmond Long Wharf.
- e. It is recommended that vessels docking with a draft of 38 feet or greater use a minimum of three tugs, two Class A and the third of Class B or two Class A tractors.
- f. It is recommended that vessels docking at the Long Wharf plan their approach to arrive at the Long Wharf no later than one-half hour prior to or no earlier than one-half hour after slack tide, based on the pilot's estimation, in order to avoid arrival at slack water.
- g. It is recommended that vessels berthing at Chevron Richmond Long Wharf Berth #1, with an LOA greater than 750 feet, moor port side to only. Any vessels wishing to moor S/S to at Berth 1 must have pre-approval from RLW. If it is necessary for a vessel with an LOA greater than 750 feet to moor starboard side to in Berth #1, vessel will, at a minimum, be required to run an additional forward spring line leading aft.

9. **Richmond Inner Harbor**

- a. Tug requirements for vessels arriving and departing Richmond Inner Harbor:

Vessels up to 600' LOA:	Draft:	Less than 30 ft.	CC
		More than 30 ft.	BC
Vessels over 600' LOA:	Draft:	Less than 30 ft.	BC
		More than 30 ft.	AB
Vessels over 700' LOA:	Draft:	Less than 30 ft.	AB
		More than 30 ft.	AA
- b. Weather permitting, vessels undocking without turning may eliminate the smaller tug if they have an adequate bow thruster, as set forth in these guidelines.
- c. Vessels greater than 650' LOA must be turned at Pt. Potrero Turning Basin.
- d. Vessels with a draft of greater than 33 ft. or greater than 700' LOA transiting to or from Richmond Inner Harbor shall plan their arrival/departure so as to pass RLW/Ferry Point within one (1) hour of slack water. Large, deep draft vessels that cannot meet this time requirement may require a tractor tug to assist. Consult with the Operations Pilot.
- e. Present channel configuration limits the size of a vessel able to use Terminal 5B to a maximum 650 feet in length and 106 feet in beam. Vessels over 600' LOA arriving and departing Terminal 5B may require specific tugs due to the marginal clearances. Please consult with the Operations Pilot.

- f. Barges in the vicinity of 5B must be moved well clear before ships can dock or undock.
 - g. Movements to or from Berth 5B are precluded when vessels are berthed at Berth 5A or Gypsum Dock (Richmond 15).
 - h. Agents representing vessels calling at IMTT or the Gypsum Terminal are responsible for determining if vessels are occupying Berth 5A, Berth 5B, or Richmond Gypsum and obstructing the channel. If so the Operations Pilot must be consulted. As a general rule, the combined beams of the vessels shall not exceed 200', the passing shall be set up near high water, and tractor tugs may be required.
 - i. In some situations it may not be possible to arrange a safe transit until the channel is clear.
 - j. Conflicts with channel obstructions are to be resolved **prior to** scheduling transits with SFBP.
10. **Terminal 4 Richmond**
- a. It is recommended that the arrival and departure of vessels be coordinated with the Operations Pilot.
11. **Pinole Shoal Channel**
- a. Maximum draft for transiting Pinole Shoal Channel will be calculated on the height of the tide one hour on either side of high water at Pinole Point. It will be based on brackish water draft (1.010) allowing for 2' UKC on the latest controlling depth. Contact the Operations Pilot for controlling depth and assistance with calculating maximum draft allowed.
12. **Rodeo (Terminal guidelines)**
- a. Lower: Vessels over 600' are to dock P/S only.
Upper: All vessels S/S only. No vessels over 600'.

Vessels over 600': Lower berth and P/S only.
13. **Selby**
- a. Presently, the terminal allows vessels up to 800' LOA or 100,000 DWT. Both port and starboard side mooring is acceptable. However, starboard side mooring is strongly recommended.
 - b. Consult the Operations pilot for tug recommendations. At the discretion of the owner or master, an assist tug may stand-by while a ship is moored to the wharf.
14. **Ozol**
- a. It is recommended that vessels dock port side to only and movements at this terminal be made during slack water or flood currents only.
15. **Amorco**
- a. See Addendum 3 for Tesoro Terminal tug and docking requirements.
16. **Anchorage 23**
- a. Vessels in Anchorage 23 must comply with the general and specific regulations as contained in Code of Federal Regulations Title 33, paragraph 110.224.

- b. As the deep water portion of the anchorage is limited, drafts of most vessels will be limited to less than 30 feet. Specific circumstances, however, may permit greater drafts for a limited time.
 - c. A tug may be required to stand by a large or deep draft vessel in anchorage 23 during changes of the current. Tug class to be determined by the Operations Pilot, or the Pilot on the vessel, depending upon the size and/or draft of the vessel or any other condition that may affect the safety of the vessel.
17. **Port of Benicia**
- a. It is recommended that vessels be docked into the current only, due to hazards posed by adverse currents and the proximity of the bulk loader. In addition, car carriers docking at the east berth must have a 2-degree list away from the berth.
 - b. Vessels arriving at Benicia Industrial Dock will require two tugs, regardless of bow thruster. Departing vessels may eliminate the smaller tug if they have an adequate bow thruster, weather and current conditions permitting.
18. **Valero**
- a. Those vessels using VALERO TERMINAL FACILITIES should comply with all of the regulations of that facility. Vessels port side to undock during ebb current only.
19. **Union Pacific Railroad Bridge**
- a. During average tidal conditions vessels can normally pass without time restrictions if the air draft is no higher than 132 feet.
 - b. Any vessel of PANANMAX Class or larger or with air draft of more than 132' must coordinate with the Operations Pilot.
20. **Avon and Martinez Terminal**
- a. Loaded tankers should dock starboard side to on the ebb.
 - b. Vessels in ballast should be turned and docked port side to on the flood.
 - c. Loaded vessels that will backload should be turned port side to during the period in which the vessel's draft will permit this to be safely done at optimum stage of the tide and current. Consult the Operations Pilot.
 - d. Vessels docked port side to at Martinez Terminal with a draft of greater than 30 ft. must sail on the flood tide only.
 - e. Vessels in ballast docked starboard side to can depart anytime during the flood or a weak ebb.
 - f. Maximum draft for vessels arriving at Avon or Martinez Terminal will be calculated on the height of the tide at Suisun Point one hour after high water slack at Avon. It will be based on fresh water draft (1.000) allowing for 2' UKC on the latest controlling depth in Bulls Head Channel. Contact the Operations Pilot for controlling depth and assistance with calculating maximum draft allowed.
 - g. See Addendum 3 for tug requirements at Avon and Martinez terminals.
21. **Pittsburg/Antioch Terminals**

- a. Vessels loading to deep draft should be docked port side to.
- b. We recommend that all vessels more than 600' LOA turn at "Riverview"
- c. Vessels more than 700' [213.4 M] LOA must have daylight above New York Point unless departing without turning.
- d. Vessels over 700' LOA, turning at Riverview, will require one Class A and one Class B tugs.
- e. Loaded vessels docked port side to and sailing during ebb current should use minimum one Class A and one Class B tugs. Loaded vessels docking as USS Posco should use a minimum one Class B and one Class C tugs. If docking down tide, they will required two Class B tugs.
- f. In general, the narrow channel limits the size of vessels calling at terminals above New York Point to the PANAMAX class (750' LOA x 106' Beam).

SACRAMENTO AND STOCKTON

1. Transit Drafts

- a. Contact the Operations Pilot for maximum allowable transit drafts.
- b. Deep drafts for specific transits may be decreased depending on navigation factors such as date, time, tidal conditions, soundings, weather conditions, vessel size and type, etc.
- c. During the period from December to April, rapid shoaling may occur on the river. The pilots may be notified by the Army Corps of Engineers or receive other information of depth changes/shoaling requiring maximum drafts to change on very short notice.
- d. All transit drafts refer to fresh water drafts.

2. Size Limitations

- a. In general, the narrow channel limits the size of vessels above New York Point to the PANAMAX class (750' LOA x 106' beam).
- b. Contact the Operations Pilot before scheduling any vessels over 700' LOA.
- c. Vessels over 520' LOA and/or 73' beam should adjust drafts to have a minimum one (1) foot trim by the stern.

3. Air Draft

- a. The air draft limit for an unrestricted transit during an average tidal cycle is 132 feet.
- b. Vessels with an air draft of greater than 132 feet should contact the Operations Pilot for allowable transit time.

4. Daylight Transits

- a. The following vessels will be allowed daylight transits only:
 - i. 650' and above LOA;
 - ii. 102' and above beam;
 - iii. vessels with severely limited visibility due to design or other factors;
 - iv. any vessel carrying hazardous materials;

- v. vessels with a deep draft exceeding 33' (Stockton);
- vi. vessels with a draft of 32' or greater and a beam in excess of 100' (Stockton).

5. **Fog Season**

- a. From November to March, frequent periods of severely restricted visibility occur. Considerable delays may be experienced. Contact the Operations Pilot to schedule the most expeditious transit time to avoid the fog.

The assigned pilot can recommend to the master a change in any of the above parameters depending on specific conditions.

**PORT OF SACRAMENTO
TRANSIT DRAFTS**

February, 2005

LENGTH	BEAM				
	85'	90'	95'	100'	105'
550' (167.63 m)	30'00"	30'00"	30'00"	30'00"	30'00"
575' (175.25 m)	30'00"	30'00"	30'00"	30'00"	30'00"
600' (182.88 m)	30'00"	30'00"	30'00"	30'00"	30'00"
625' (190.49 m)	30'00"	30'00"	30'00"	30'00"	30'00"
650' (198.12 m)	30'00"	30'00"	30'00"	30'00"	30'00"
675' (205.74 m)	30'00"	30'00"	30'00"	30'00"	30'00"
700' (213.36 m)	29'00"	29'00"	29'00"	29'00"	29'00"
725' (220.98 m)	29'00"	29'00"	29'00"	29'00"	29'00"
750' (228.60 m)	29'00"	29'00"	28'00"	28'00"	28'00"

NOTES:

1. The above drafts are for advance planning only. Deep drafts for specific transits may be decreased depending upon navigation factors such as date, time, tidal conditions, soundings, weather factors, vessel size and type, etc.
2. Vessels above 520' in length and/or 73' beam should have a one (1) foot drag.
3. As vessels become larger, their air draft becomes an issue for upriver ports because of the height limits from bridges and overhead cables. Maximum air draft should be no greater than 132' (40 m.). Keel to mast should not be greater than 160' (49 m.).
4. Daylight transits only for:
 - a. 650' and above in length,
 - b. 102' and above in breadth,
 - c. vessels with severely limited visibility due to design or other factors, or
 - d. any vessel carrying hazardous materials.
5. During the period from November to March, delays due to fog may be experienced.
6. During the period from December to April, rapid shoaling may occur on the river. The pilots may be notified by the Army Corps of Engineers or receive other information of depth changes requiring drafts to be changed with very short notice.
7. The assigned pilot can recommend to the Master a change in any of the above parameters depending upon specific conditions.

**PORT OF STOCKTON
TRANSIT DRAFTS**

February, 2005

LENGTH	BEAM				
	85'	90'	95'	100'	105'
(Fresh Water)					
550' (167.63 m)	34'00"	34'00"	34'00"	34'00"	34'00"
575' (175.25 m)	34'00"	34'00"	34'00"	34'00"	34'00"
600' (182.88 m)	34'00"	34'00"	34'00"	34'00"	34'00"
625' (190.49 m)	34'00"	34'00"	34'00"	34'00"	34'00"
650' (198.12 m)	34'00"	34'00"	34'00"	34'00"	34'00"
675' (205.74 m)	33'06"	33'06"	33'06"	33'06"	33'06"
700' (213.36 m)	33'00"	33'00"	33'00"	33'00"	33'00"
725' (220.98 m)	33'00"	32'00"	32'00"	32'00"	32'00"
750' (228.60 m)	32'00"	32'00"	32'00"	31'00"	31'00"
775' (236.22 m)	32'00"	32'00"	31'00"	31'00"	31'00"
800' (243.84 m)	31'00"	31'00"	31'00"	31'00"	31'00"

NOTES:

1. The above deep drafts are for advance planning only. Deep drafts for specific transits may be decreased depending upon navigation factors such as date, time, tidal conditions, soundings, weather factors, vessel size and type, etc.
2. Vessels above 520' in length and/or 73' beam should have a one (1) foot drag.
3. As vessels become larger, their air draft becomes an issue for upriver ports because of the height limits from bridges and overhead cables. Maximum air draft should be no greater than 132' (40 m.). Keel to mast should not be greater than 163' (49.6 m.).
4. Daylight transits only for:
 - a. 650' and above in length,
 - b. 102' and above in breadth, or
 - c. vessels with severely limited visibility due to design or other factors.
 - d. vessels with a deep fresh water draft exceeding 33',
 - e. vessels 32' or greater in depth and beam in excess of 100', or
 - f. any vessel carrying hazardous materials.
5. During the period from November to March, delays due to fog may be experienced.
6. During the period from December to April, rapid shoaling may occur on the river. The pilots may be notified by the Army Corps of Engineers or receive other information of depth changes requiring drafts to be changed with very short notice.

7. The assigned pilot can recommend to the Master a change in any of the above parameters depending upon specific conditions.

ADDENDUM 1-A

Chevron Richmond Long Wharf
Tugboat Classification
Revision 12-18-98

CLASS “A”

Any conventional tug with Ahead Bollard Pull >85,000lbs. , and

Astern Bollard Pull >55,000lbs. OR

Any tractor boat that has Bollard Pull more than or equal to 60,000lbs. In any direction

CLASS “B”

Any conventional tug with Ahead Bollard Pull between 85,000lbs. To 60,000lbs. And

Astern Bollard Pull > 45,000lbs. OR

Any tractor boat that has Bollard Pull less than 60,000lbs. In any direction

CLASS “C”

Any conventional tug with Ahead Bollard Pull less than 60,000lbs.

SHIP/TUGBOAT ASSISTANCE

VESSEL SIZE

Up to 30,000DWT*

30,000 to 65,000DWT*

65,000 to 130,000DWT

130,000 to 195,000DWT**

Over 195,000DWT**

MOORING (no. of tugs)

2 Class B tugs*

1 Class B tug* plus
 1 Class A tug = 2 tugboats

2 Class A tugs plus
 1 Class B tug = 3 tugboats

4 Class A tugboats, OR
 3 Class A (if two tractor tugboats are employed)

4 Class A tugboats

UNMOORING (no. of tugs)

2 Class B tugs*

1 Class B tug* plus
 1 Class A tug = 2 tugs

2 Class A tugboats

3 Class A tugboats

3 Class A tugboats plus
 1 Class B tug = 4 tugboats

* A bow thruster of 1000hp or greater is equivalent to a Class “B” tugboat

** On vessels of this size, usage of at least two tractor tugboats is recommended.

ADDENDUM 1-B

**GUIDELINES FOR 188,000 DWT Tankers
Calling at the CHEVRON RICHMOND LONG WHARF
for Maneuvering Into Berth # 4 port side to, or starboard side to**

DOCKING:

1. Chevron requires a minimum underkeel clearance (UKC) of 2 feet for all vessels operating in the Maneuvering Area off the Richmond Long Wharf. (See latest revision of the Richmond Long Wharf Draft Restriction Letter).
2. While alongside the berth, all vessels must maintain a minimum underkeel clearance of 2 feet. (Upon docking, the vessel should be able to set through the next low water and maintain 2 feet UKC with the equivalent arrival draft).
3. The ship is heading into the prevailing current for the “docking maneuver.”
4. Vessels SHALL NOT dock if the wind exceeds 25 knots (gusting or steady). Vessels SHALL NOT dock if the visibility is less than one mile. Call Chevron Richmond Long Wharf at (510) 242-4494 or VHF Channel 10 for weather status. WARNING: Vessels SHALL NOT moor port-side-to at Berth # 4 if there is any observed or forecasted wind from the North to East quadrant exceeding 10 knots.
5. Tugboat Requirements for docking (Class A rated): three (3) tugboats (if there are a minimum of (2) tractors and (1) twin screw (Class A) OR (4) twin screw (Class A)
6. Vessels must have the offshore anchor ready for emergency use.

WHILE ALONGSIDE:

1. If wind speed exceeds 20 knots from the north to east quadrant, secure cargo operations and remove DCMAs.
2. If wind speed exceeds 25 knots from the North to East quadrant, order (3) Class A tugs to hold ship alongside the berth.

UNDOCKING:

1. Vessel should sail/depart on a weak flooding current. Vessel’s Master, Pilot and Chevron Shipping will agree on the departure time and weather conditions.
2. Employ a minimum of (3) tugboats, twin screw (Class A) or better.

Provided by Chevron Shipping 6-24-03.

ADDENDUM 1-C

Recommended Guidelines for Separating Vessel Arrivals and Departures at Richmond Long Wharf

Objective: To provide safe time buffers between vessel movements to avoid meeting situations in either the maneuvering area off the Long Wharf or the Southampton Shoal Channel and its approaches, and to avoid forcing vessels into a “holding pattern” to await berth space. These Guidelines supplement the Federal RNA Rules.

Note: These guidelines shall in no way interfere with or preclude the authority of the Master and or Pilot of any vessel. Nothing in these guidelines should be construed as preventing the terminal and departing or arriving vessels from agreeing to a divergence from these guidelines, as long as ALL parties agree and no vessel is put in an unsafe position or in violation of the Regulated Navigation Area (RNA).

Pre-arrival Notifications:

Vessels are required to contact the Richmond Long Wharf three (3) hours prior to the scheduled docking time on VHF Channel 10. Use telephone communication (510-242-4494, Richmond Long Wharf Control Room) only as a backup to the radio call. At this time the Head Operator (H. O.) will advise the vessel of the following:

1. Confirmation of berth assignment and availability (i.e. empty or occupied with departure information).
2. Scheduled departure times of vessels from other RLW berths, vessel names and which side to the berth (port or starboard)

At one hour before your assigned docking time, again contact Richmond Long Wharf on VHF Channel 10 and establish what frequency the pilot will use to moor the vessel. Richmond Long Wharf has VHF Channels 7A and 77 available on their portable VHF radio.

Vessels shifting to the Long Wharf from Anchorage or from other facilities are required to contact the Wharf before heaving anchor or departing berth.

Vessels inbound from sea are advised to contact the Long Wharf when they reach the Golden Gate Bridge for an update on RLW vessel schedules.

A communication log will be kept at the Long Wharf to verify that the required pre-arrival notification has taken place.

Vessel Separation Times:

Case A: Successive arrivals and successive departures

- A one-hour time separation between last line on vessel number 1 and the first line on vessel number 2, in other words, a clear hour between mooring operations.

Case B: Incoming and departing vessels using separate routes (for example, one vessel transiting Southampton Shoal Channel and the other transiting the East span of the San Rafael Bridge.)

- A one-hour time separation between last line on vessel number 1 and the first line on vessel number 2, in other words, a clear hour between mooring operations.

Case C: Incoming and departing vessels both using Southampton Shoal Channel

- A three-hour time separation between actual departure and arrival times (“departure” means the time of beginning to let go the departing vessel’s lines and “arrival” means the time the inbound vessel arrives alongside the Long Wharf), with priority being given to the inbound vessel. (Note: vessels shifting from Anchorage #5 to RLW must remain clear of Southampton Shoal Channel and approaches until the departing vessel clears them, but need not wait for the three hours.)

- *Note:* If the Departing Vessel is delayed at the Wharf, the H. O. must, as soon as possible, contact and advise the inbound vessels of the delay (VTS at 415-556-2760 and Pilot Office at 415-393-0457 can assist if needed). If the inbound vessel is committed to its approach to Southampton Shoal Channel (usually by the time the vessel reaches the Golden Gate Bridge), the departing vessel must be held at the Long Wharf until the arriving vessel is safely alongside. (This assumes the vessel at the wharf is in a different berth than the inbound vessel's intended berth). The Head Operator will make all decisions at the wharf regarding the holding of vessels.

Please note: If in case C, the Departing vessel must meet a particular tide and is constrained by draft, and if the inbound vessel is still safely outside the Bay or can safely proceed to anchor, the inbound vessel will be asked to wait for the departing vessel. The head operator should anticipate these cases and advise the scheduled inbound vessel sufficiently in advance of coming into the Bay or before heaving anchor.

It is the duty of the Chevron Head Operator to work toward resolving conflicts and make any required decision regarding the holding of a vessel at the Long Wharf.

ADDENDUM 1-D

Richmond Long Wharf Vessel Pre-Arrival Communication

5.1. Berthing

Chevron periodically issues draft restrictions for vessels calling at Richmond Long Wharf. These restrictions should be obtained through the vessel's agent, or directly from Chevron Shipping Company's Richmond office (see "official addresses").

Berthing of a deep draft tanker should be timed to allow the ship to remain along side at her arrival draft through the next low water.

If cargo transfer is delayed and it's determined that the berth allowable draft limit (BADL) will be exceeded, the vessel shall be ordered to make preparations to sail six hours before BADL will be reached, making all tug and pilot arrangements. Associated costs will be determined based on the responsibility for the berth delay.

Vessel shall be required to depart the berth based on safe tidal and current conditions, but always before maneuvering area draft limit (MADL) is reached.

The Wharf Coordinator and your agent will set your berth assignment prior to your arrival. If a berth is not available at the time of your arrival your agent will instruct you to go to anchor (as directed by the captain of the port) and maintain radio contact with Richmond Long Wharf by VHF Radio Channel 10, 156.5 MHz.

Your vessel's agent is responsible for providing you with your anticipated arrival time at the Long Wharf. **At least three hours** before your assigned docking time, contact Richmond Long Wharf by VHF Radio Channel 10 to confirm your anticipated docking time. At that time the Wharf will advise you of Berth assignment and any expected vessel traffic at the Long Wharf. Use phone communication (Long Wharf Control Room # 510-242-4494) only as a backup to the radio call. For vessels arriving from anchorage or from other facilities, this call should be made **prior to heaving anchor or departing berth.**

The Wharf will also advise your vessel of any changes once the vessel has made initial contact. Inbound vessels will typically have priority over departing vessels. If an outbound vessel is restricted to a particular sailing time due to draft and tide, and if the inbound vessel can safely lose time outside the Bay or safely proceed to anchor, the Wharf will request that the outbound vessel have priority. If there is a decision to be made regarding holding a vessel alongside, it will be made by the Head Operator.

At one hour before your assigned docking time, you are to again contact Richmond Long Wharf to establish with the terminal what channel the pilot will be using to moor your vessel.

For docking purposes, we have available the following VHF Channels: **7A & 77**.

While mooring or unmooring, our internal safety procedures require that vessel-to-terminal communications be established before vessel is 150' from wharf, and then maintained throughout the event. Vessels are cautioned to check with SF Bay VTS on other vessel movements in the area that are not controllable by the Richmond Long Wharf, for instance, vessels proceeding out of Richmond Inner Harbor which may also intend to use Southampton Shoal Channel.

As a further safety precaution, regarding tidal current, ship's pilots and captains should consider the following warning:

When maneuvering a tank vessel or barge near the Richmond Long Wharf, pilots and/or captains are advised to:

1. Advantageously utilize the tidal currents when docking or undocking,
2. Avoid docking at "Slack Current / slack water" conditions

Swirling "slack current/slack water" conditions may increase the difficulty of a docking maneuver.

TO AVOID DANGEROUS MEETING AND PASSING SITUATIONS IN THE MANEUVERING AREA AND SOUTHAMPTON SHOAL CHANNEL, DEPARTING VESSELS MUST BE CLEAR OF CHANNEL BEFORE THE NEXT ARRIVING VESSEL CAN ENTER THE CHANNEL, AND VICE VERSA.

ADDENDUM 2

SAFETY CHECKLIST FOR BUNKERING VESSELS BY BARGE AT PORT OF OAKLAND BERTHS 35, 37 and 55-59

1. Prior to arrival of the bunker barge alongside the receiving vessel, the tug captain will contact the Marine Exchange for arrival and departure information for all vessels transiting OOH or OIH over the intended duration of the transfer.
2. Following arrival, the tug captain will notify Vessel Traffic to request all vessels to proceed slowly and with caution when passing the bunker barge.
3. The tug will monitor VHF channels 10 and 13 at all times.
4. The tug will remain in the barge notch with engines on standby and on wheelhouse control.
5. A minimum of 2 head lines, 2 spring lines and 2 stern lines will be used to secure the tug/barge unit to the vessel. One of the stern lines will be taken from the tug's offshore Beebe winch.
6. The receiving vessel will have a VHF equipped watch stander available at all times to tend the bunker hose and lines.
7. The tug captain will obtain from the Pilot Dispatcher the name and unit number of each pilot on vessels transiting the area for possible direct communications.
8. Bunker transfer operations will cease when vessels are transiting the immediate area.
9. A second man will be stationed on the barge when vessels are transiting the immediate area.

ADDENDUM 3

TESORO TERMINAL REGULATIONS FOR SHIPS AND BARGES

The San Francisco Harbor Safety Plan requires that all vessels must maintain 2 feet of under keel clearance (UKC) when underway.

Tesoro requires the vessel to maintain 2 feet of UKC through any stage of the tide while alongside its terminal.

Tug Requirements

- Barges with 5,000 long tons of petroleum cargo on board must use a twin screw Class C tug or better for docking and undocking to complement the barge's line haul tug.
- Ships up to 50 MDWT will require as a minimum for docking and undocking two (2) twin screw conventional tugs Class A.
- 50 MDWT to 120 MDWT will require as a minimum for docking and undocking one (1) tractor and one (1) twin screw conventional tug Class A.
- 120 MDWT to 188.5 MDWT will require as a minimum for docking two (2) tractors and one twin screw conventional tug Class A. Polar Tankers, Millennium Class, will require for docking two (2) tractors Class A.
- 120 MDWT to 188.5 MDWT will require as a minimum for undocking two (2) tractors Class A.

At Amorco, if docking starboard to, then the vessel must dock into the ebb and can only leave on ebb current. The sailing time is to be set no later than two hours prior to low water slack based on the "Martinez Marina, 0.61 nmi. NNW of (23d)" current station.

At Amorco, if docking port side to, then the vessel can leave at any state of the tide/current, but during the ebb, the current should be less than one knot.

Vessels up to 150 MDWT must have 2' of UKC when passing Pinole Shoal.

Vessels in excess of 150 MDWT must have 3' of UKC when passing Pinole Shoal.

ADDENDUM 4

FLAT TOW GUIDELINES

When a tug company or other customer requests the services of a pilot for assistance on flat tows, the following policy shall apply from the date hereof. We define a "flat tow" as a movement of a vessel without propulsion and where the vessel is not fully manned or lacks a properly-licensed master employed by the vessel owner or operator. Under such circumstances, control of the vessel will have to be through instructions to various assisting tugs and the hired linesmen.

To properly address safety and liability concerns, the San Francisco Bar Pilots Association, acting on behalf of its members, is hereby imposing certain minimum requirements as a condition for assigning pilots on flat tow operations. The requirements are:

1. Adequate tugs in both number and size must be assigned. The San Francisco Bar Pilots generally recommend the following tugs:

<u>LOA (feet)</u>	<u>LOA (meters)</u>	<u>Recommended Tugs</u>
less than 600	183	1 Class A, 1 Class B and 1 Class C
600 - 700	183 - 213.4	1 Class A and 2 Class B
700 - 800	213.5 - 243.8	2 Class A and 1 Class B
800 - 900	243.9 - 274.3	2 Class A and 2 Class B

The actual number and size of the tugs to be assigned to a flat tow operation will depend on a number of factors which will affect the safe movement of the tow. For planning purposes, guidance can be obtained from the Operations Pilot of the pilot office who will endeavor to coordinate the assigned pilot's concerns with the intended flat tow operation.

However, the assigned pilot has it in his or her discretion to refuse to accept the assignment if the number and size of the tugs, as well as the size and type of lines available aboard for use during the movement are not satisfactory to that pilots. Again, if you have any questions about tug size or needs, please contact the Operations Pilot.

2. Adequate linesmen must be aboard the towed vessel to receive, handle and let go tug lines during the operation. These individuals must be organized into two gangs, one forward and one aft, and there shall be an experienced supervisor for each gang who will transmit the pilot's directions, usually given by radio, to the linesmen. For this reason, adequate radios, compatible with the pilot's own radio, must be provided to the linesmen supervisors.
3. Because of the critical role of the tugs to the operation and because the pilot is serving merely as advisor to the person in control of the towed vessel, the senior-most tug operator will be designated prior to the operation, as the person in control, or "master" of the tug, and shall be aboard the tow at all times during the maneuver. The operator assigned to the tow will coordinate the movement with VTS and other authorities.
4. Our members always work hard to ensure a safe operation. However, the pilot acts as an advisor only. Neither the pilot, the Operations Pilot, nor the San Francisco Bar Pilots Association warrants the adequacy of the tugs, their lines, the linesmen or the tug operator in control of the tow and the movement.
5. The Harbors and Navigation Code, Division 5, section 1198, gives every vessel, and its owner, operator and/or charterer a choice of options for protecting pilots from liability. Pilots are required to have available "trip" insurance for purchase by those hiring a pilot. The trip insurance protects the pilots from liability that may be incurred in connection with the provision of pilotage service. Trip insurance is available from the SFBP upon advance written request. Alternatively, if a vessel and its owner, operator and/or charterer

do not wish to purchase the trip insurance, then by law they are deemed to have agreed to defend and indemnify the pilot hired, as well as the SFBP and those associated with it, from all liabilities that may arise in connection with the provision of pilotage. Protecting the pilots from liability by choosing from the options described herein is required both by statute, and as a contractual condition.

It is strongly suggested that consultation with the Operations Pilot takes place **before** going to bid on any towing operation involving pilot services.

If you have any questions about any of these requirements, please feel free to contact the Operations Pilot at the pilot office.

This document was created with Win2PDF available at <http://www.daneprairie.com>.
The unregistered version of Win2PDF is for evaluation or non-commercial use only.