

CITY AND COUNTY OF SAN FRANCISCO Port of San Francisco

Contract No. 2842 Maintenance Dredging 2022-2024

ADDENDUM No. 01 Issued: September 21, 2022

The following clarifications, changes, additions or deletions are incorporated into the Bid Documents as if a part of the original released Bid Documents. All other terms and conditions of the Bid Documents remain in full force and effect. Respondents to the Advertisement for Bids solicitation must acknowledge receipt of this addendum in their submittal by submitting a signed and completed copy of Section 00 43 20 (Acknowledgement of Receipt of Addenda).

CHANGES TO SPECIFICATIONS (5 Sections As Noted Below)

- 1) <u>Section 00 21 13 Instructions to Bidders</u> Revise as follows: a. Add statement that Bid discounts may be applied.
- 2) <u>Section 00 22 11 Supplementary Instructions...</u> Revise as follows: a. Add §1.6.A to clarify CMD discount for contracts estimated \$400K to \$10M.

3) Remove all references to CMD Form 2B as follows:

- a. Section 00 01 01 Table of Contents
- b. Section 00 40 13 Bidding Forms Checklist
- c. CMD Form 2B
- d. Section 00 49 00 Supplementary Bidding Forms Checklist

4) Exhibits Attached:

- a. Exhibit A Tentative Schedule
- b. Exhibit B 2022 and 2023 San Francisco Passenger Terminal Schedules
- c. Exhibit C Dredge History
- d. Exhibit D Department of the Army Permit, Permit Number 2013-00333S
- e. Exhibit E San Francisco Bay Conservation and Development Commission Permit, No. M2002-071.00
- f. Exhibit F California Regional Water Quality Control Board, CIWQS Place ID 735444
- g. Exhibit G Summary of Environmental Work Windows Applicable to Dredging

Contract No. 2842

Maintenance Dredging 2022 - 2024

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PORT OF SAN FRANCISCO

 TEL
 415
 274
 0400

 FAX
 415
 274
 0551

TTY 415 274 0587 WEB sfport.com

CHANGES TO DRAWINGS – NONE

If the Bidder has any questions regarding this addendum, please contact Shannon Alford, Project Manager, at (415) 274-0263.

REMINDER: Bidders are required to acknowledge receipt of this addendum in Document 00 43 20.

Bids are due September 28, 2020 at 10:00 AM

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Rod K. Iwashita *Chief Harbor Engineer* Port of San Francisco Pier 1, SF, CA 94111

Contract No. 2842

Maintenance Dredging 2022 - 2024

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PORT OF SAN FRANCISCO

TEL 415 274 0400 FAX 415 274 0551 TTY 415 274 0587 WEB sfport.com ADDRESS Pier 1 San Francisco. CA 94111

Contract Estimate:	\$9,000,000
Time Allowed for Completion:	426 consecutive calendar days
	(Conditional, refer to Section 00 73 02)
Liquidated Damages:	Varies, refer to Section 00 73 02 for details
Contract Basis:	Lump Sum Bid Items With Unit Prices
License Required:	Class "A" California Contractors License
Contract Monitoring Division	
Local Business Enterprise	LBE = 0%
(LBE) Subcontracting Goal:	

<u>Bid discounts may be applied as per San Francisco Administrative Code Chapter 14B.</u> Although there is no LBE subcontracting requirement for this project, Bidders are highly encouraged to add Small-, Micro-, and SBA-LBE subcontractors to their team. The successful Bidder will inform CMD and the Port of all subcontracting opportunities available before each dredging event during the course of the contract. The successful Bidder is encouraged to work with CMD to identify Micro-, Small-, and SBA-LBE firms available to perform subcontracting tasks, and will prioritize awarding available subcontracting work to LBEs to the extent possible. <u>Furthermore, CMD forms will need to be submitted as required with the proposal and for contract monitoring.</u>

If necessary, the Port will issue bid date changes by addendum and will post current date for receiving bids on the Bids and Contracts page at the Port's website address: https://sfport.com/business/contractopportunities.

This notice is for information only. Please refer to the bid documents for specific requirements.

Insurance Requirements: Please refer to Section 00 73 16, and submit requisite insurance documentation within ten (10) working days after the date on which the contract is awarded.

Schedule: Contractor shall be responsible for fully understanding scheduling constraints associated with certain marine construction activities and the referenced Port approvals and permits from applicable government agencies, including the San Francisco Bay Regional Water Quality Control Board, U.S. Army Corps of Engineers, National Oceanic and Atmospheric Administration - National Marine Fisheries Service, California Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service special status species. The Pacific herring spawning or hatching season extends from December 1 – February 28; salmon and steelhead trout seasons extends from December 1 to June 1. Contractor shall comply with all construction regulations and construction mitigation requirements resulting from these specific spawning seasons. Coordination is considered incidental, and no compensation shall be paid for this coordination.



Contractor Qualifications:

- 1. Valid Class A contractor's license, issued by the California Contractor's State Licensing Board.
- 2. Contractor shall submit documented experience performing a minimum of three (3) projects with similar work as shown in the Contract Documents over the last 10 years,
- 3. Contractor shall submit documented experience with a minimum three (3) public works projects over the last 10 years. Contractor shall submit documentation showing ability to dredge, transport, and dispose at least 5,000 cubic yards sediment on a daily basis.
- 4. Contractor shall submit subcontractor qualifications of an independent certified hydrographer surveyor (national certification American Congress of Surveying and Mapping (ACSM) –The Hydrographic Society of America (THSOA) Hydrographer Certification. Contractor shall submit surveyor documentation (whether on the Contractor's staff or a subcontractor) for a minimum of three (3) years experience in performing hydrographic survey for sites similar to the Contract Documents.

B. The three categories of LBEs are Small-LBEs, Micro-LBEs, or SBA-LBEs. Such LBEs are also either MBEs, WBEs, or OBEs.

1.3 LBE SUBCONTRACTOR PARTICIPATION

A. The LBE subcontractor participation requriement for this Contract has been waived for this Contract.

- 1. Bidders are highly encouraged to add Small-, Micro-, and SBA-LBE subcontractors to their team (see Section 00 43 36). The successful Bidder will inform CMD and the Port of all subcontracting opportunities available before each dredging event during the course of the contract. The successful Bidder is encouraged to work with CMD to identify Micro-, Small-, and SBA-LBE firms available to perform subcontracting tasks, and will prioritize awarding available subcontracting work to LBEs to the extent possible.
- 2. Bidders are further advised that they may not discriminate in the selection of subcontractors on the basis of race, gender, or any other basis prohibited by law, and that they shall undertake all required good faith outreach steps in such a manner as to ensure that neither MBEs nor WBEs nor OBEs are unfairly or arbitrarily excluded from the required outreach.

1.4 CMD BIDDING FORMS

- A. No later than 5 working days after the date of the City's notification of the bid results, the apparent low Bidder, and any other Bidder so requested, shall submit completed and properly signed the following CMD Forms to CMD Compliance Officer:
 - 1. FORM 3: CMD Compliance Affidavit.
 - 2. FORM 6: CMD LBE Subcontractor Participation Affidavit.
 - 3. FORM 6A: CMD LBE Trucking Form.
- B. Failure to submit properly completed CMD Bid forms may render the Bidder non-responsive and may be cause for rejection of its Bid.

1.5 SURETY BOND PROGRAM

A. Bidders are alerted to the City's surety bond program, which assists LBE contractors in obtaining bonding and financing for contracts. For program information contact Merriwether & Williams Insurance Services at (415) 986-3999 or email <u>bond@IMWIS.com</u>.

1.6 BID DISCOUNTS

 Contracts with an Estimated Cost in Excess of \$400,000 and Less Than or Equal to \$10,000,000. A 10% bid discount will apply to any bids submitted by CMD certified Small or Micro-LBEs. If, after the application of the 10% bid discount to bids submitted by Small or Micro-LBEs, the apparent low Bidder is not a Small or MicroLBE, a 5% bid discount will be applied to any bid from an SBA-LBE in accordance with the procedures and limitations set forth in Section 14B.7(E) of the Code.

END OF SECTION

SECTION 00 01 10

TABLE OF CONTENTS

Section No. Section Title

PROCUREMENT AND CONTRACTING GROUP

Introductory Information

00 01 07	SEALS PAGE
00 01 10	TABLE OF CONTENTS

PROCUREMENT REQUIREMENTS

00 11 13	ADVERTISEMENT FOR BIDS
00 21 13	INSTRUCTIONS TO BIDDERS
00 21 14	QUESTIONS ON BID DOCUMENTS
00 21 16	REQUEST FOR TRADE EXEMPTION FORM
00 22 11	SUPPLEMENTARY INSTRUCTIONS TO BIDDERS: LOCAL BUSINESS
	ENTERPRISE (LBE) PROGRAM

Bidding Forms (To Be Submitted With Bid)

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BIDDING FORMS CHECKLIST
BID FORM
DESCRIPTION OF BID ITEMS
BID SECURITY FORM
ACKNOWLEDGMENT OF RECEIPT OF ADDENDA
PROPOSED SUBCONTRACTORS FORM
BIDDER'S QUALIFICATIONS
BIDDER'S SAFETY RECORD
RELEASE AND WAIVER AGREEMENT
HIGHEST PREVAILING WAGE RATE CERTIFICATION
CERTIFICATE OF BIDDER REGARDING APPRENTICESHIP TRAINING
PROGRAM
CERTIFICATE OF BIDDER REGARDING NONDISCRIMINATION IN
CONTRACTS AND BENEFITS
CERTIFICATE OF BIDDER REGARDING CONTRACTING IN STATES THAT
HAVE ENACTED DISCRIMINATORY LGBT, RESTRICTIVE ABORTION, OR
VOTER SUPPRESSION LAWS
NONCOLLUSION AFFIDAVIT
CERTIFICATION OF BIDDER REGARDING DEBARMENT AND SUSPENSION
BIDDER'S DIVERSITY AND EQUITY PROGRAMS
FORM 2B:"GOOD FAITH OUTREACH" REQUIREMENTS FORM

Supplements to Bidding Forms (To Be Submitted After Bid Opening)

00 49 00	SUPPLEMENTARY BIDDING FORMS CHECKLIST
00 49 00-APPA-1	SAFETY QUALIFICATION FORM
CMD3	FORM 3: CMD COMPLIANCE AFFIDAVIT
CMD6	FORM 6: CMD LBE SUBCONTRACTOR PARTICIPATION AFFIDAVIT
CMD6A	FORM 6A: CMD LBE TRUCKING FORM
00 49 12	EXPERIENCE STATEMENT
00 49 14	CERTIFICATION OF SUBCONTRACTOR, LOWER-TIER SUBCONTRACTOR
	OR SUPPLIER REGARDING DEBARMENT AND SUSPENSION
00 49 15	CERTIFICATE OF SUBCONTRACTOR REGARDING APPRENTICESHIP
	TRAINING PROGRAM

BIDDING FORMS CHECKLIST

To be submitted with Bid for:

MAINTENANCE DREDGING 2022 - 2024 (Port of San Francisco Contract No. 2842)

- A. Each Bidder shall submit with its Bid the following forms, properly completed and executed:
 - Executed Bid Form (Section 00 41 00), with contractor's license number and expiration date.
 - Bid security equal to 10% of the Bid (Section 00 43 13)
 - Acknowledgment of Receipt of Addenda (Section 00 43 20)
 - Proposed Subcontractors Form (Section 00 43 36)
 - Bidder's Qualifications (Section 00 45 13)
 - Bidder's Safety Record (Section 00 45 14).
 - Release and Waiver Agreement (Section 00 45 16)
 - Highest Prevailing Wage Rate Certification (Section 00 45 60)
 - Certificate of Bidder Regarding Apprenticeship Training Program (Section 00 45 65)
 - Certificate of Bidder Regarding Nondiscrimination in Contracts and Benefits (Section 00 45 70)
 - Certificate of Bidder Regarding Contracting in States that Have Enacted Discriminatory LGBT, Restrictive Abortion, or Voter Suppression Laws (Section 00 45 78)
 - □ Non-collusion Affidavit (Section 00 45 80)
 - Certification of Bidder Regarding Debarment and Suspension (Section 00 45 82).
 - Bidder's Diversity and Equity Program (Section 00 45 83)
 - □ FORM 2B: "Good Faith Outreach" Requirement Form, and supporting documentation for Items 2 and 4 of the Form.
- B. Envelopes containing Bids shall be sealed, addressed to San Francisco Port Commission, and designated as "Bid for MAINTENANCE DREDGING 2022 2024 (Port of San Francisco Contract No. 2842)". Envelopes shall bear the name and address of the Bidder.
- C. The Executive Director of the Port of San Francisco reserves the right after opening Bids to reject any or all Bids, and to waive any minor irregularity in a Bid.
- D. Bids must be submitted via email to <u>constructionbids@sfport.com</u> prior to the due date and time with the following in the Subject: "Title: BID CONTRACT 2842". Hard copy bids shall be postmark stamped by due date or earlier at the Port of San Francisco offices, **Pier 1, The Embarcadero, San Francisco, California 94111**, no later than the date and time specified in the Advertisement for Bids, or as subsequently specified if changed by Addendum.

END OF SECTION

SECTION 00 49 00

SUPPLEMENTARY BIDDING FORMS CHECKLIST

To be submitted after bid opening for:

MAINTENANCE DREDGING 2022 - 2024 (Port of San Francisco Contract No. 2842)

- A. No later than **5 working days** after the date of Bid opening the apparent low Bidder, and any other Bidder so requested, shall submit to the Contract Compliance Officer the following CMD forms, completed and properly signed:
 - Supporting documentation for Form 2B, Items 5 and 6.
 - **FORM 3: CMD Compliance Affidavit.**

 - FORM 6A: CMD LBE Trucking Form.

<u>Email above forms to</u>: Melinda Kanios <u>Melinda.Kanios@sfgov.org</u> Contract Monitoring Division, Pier 1, The Embarcadero, San Francisco, CA 94111 <u>WITH A COPY TO</u>: <u>constructionbids@sfport.com</u>

- B. <u>Within</u> **5 working days** after the date of the Bid opening the apparent low Bidder and any other Bidder so requested shall submit the following completed forms and additional sheets as necessary:
 - Experience Statement (Section 00 49 12).
 - Certification of Subcontractor, Lower-Tier Subcontractor or Supplier Regarding Debarment and Suspension (Section 00 49 14), completed by each subcontractor, lower-tier subcontractor and supplier for lower tier covered transactions of \$25,000 or more.
 - Certificate of Subcontractor Regarding Apprenticeship Training Program form (Section 00 49 15).
 - 00 49 00-APPA: Safety Qualification Form

Email above forms to: constructionbids@sfport.com

C. <u>Email Local Hiring Requirements: Refer to Section 00 73 30 for Local Hiring forms required to be</u> <u>submitted after Award of Contract to:</u> <u>constructionbids@sfport.com</u>

END OF SECTION

DREDGING TENTATIVE SCHEDULE - CONTRACT 2482

Facility	Depth								
		-	FY202	2/2023			FY202	3/2024	
		SFDODS	SF-11	MWP-c	MWP-f	SFDODS	SF-11	MWP-c	MWP-f
Fisherman's Wharf	Varies						25,000		
Hyde Street Harbor	-14								
S.Beach Harbor	-12		40,000						
Pier 35 East	-35	50,000							
Pier 27	-35	50,000						35,000	
Pier 80A	-40								
Pier 80B	-40								
Pier 80C	-40							15,000	
Pier 80D	-35								
Islais Creek Inner Channel	-40								
Pier 92	-35								
Islais Creek Outer Channel	-40						60,000		
Islais Creek Approach	-40					25,000			
Pier 94	-40								
Pier 96	-40								
Total Volume (Cubic Yards)		100,000	40,000	0	0	25,000	85,000	50,000	0

SFDODS = Deep Ocean SF-11 = In-Bay Alcatraz MWP-c = Montezuma Wetlands Cover

Exhibit B

PORT

(Updated Sep-02-2022)



No.	Vessel	ETA Dav	Date	Time	Last Port	ETD Dav	Date	Time	Next Port	Berth	Cruise Line	Port Agent	Type	Length	Passengers	
1	Seven Seas Mariner	Mon	Jan-03-2022	8:00 AM	San Diego	Wed	Jan-05-2022	6:00 PM	Honolulu	Pier 27	Regent	SMS	Full Turn	713'	708	
2	Ruby Princess	Thu	Jan-03-2022 Jan-06-2022	7:00 AM			Jan-05-2022 Jan-06-2022	4:00 PM		Pier 27 Pier 27	Princess	Metro	Full Turn	951'	3.080	
					Cabo San Lucas	Thu			Puerto Vallarta							
3	Ruby Princess	Sun	Jan-16-2022	7:00 AM	Cabo San Lucas	Sun	Jan-16-2022	4:00 PM	Hilo	Pier 27	Princess	Metro	Full Turn	951'	3,080	
	EVENT	Mon	Jan-24-2022			Mon	Jan-24-2022			Pier 27						
4	Ruby Princess	Mon	Jan-31-2022	7:00 AM	Ensenada	Mon	Jan-31-2022	4:00 PM	Puerto Vallarta	Pier 27	Princess	Metro	Full Turn	951'	3,080	
5	Ruby Princess	Thu	Feb-10-2022	7:00 AM	Cabo San Lucas	Thu	Feb-10-2022	4:00 PM	Honolulu	Pier 27	Princess	Metro	Full Turn	951'	3,080	
	EVENT	Fri	Feb-11-2022			Sun	Feb-13-2022			Pier 27						
	EVENT	Tue	Feb-15-2022			Tue	Feb-15-2022			Pier 35S						
	EVENT	Sat	Feb-19-2022			Sun	Feb-20-2022			Pier 27						
6	Ruby Princess	Fri	Feb-25-2022	7:00 AM	Ensenada	Fri	Feb-25-2022	4:00 PM	Cabo San Lucas	Pier 27	Princess	Metro	Full Turn	951'	3,080	
	EVENT	Thu	Mar-10-2022			Thu	Mar-10-2022			Pier 27	-	-				
	EVENT	Tue	Mar-15-2022			Thu	Mar-17-2022			Pier 27						
7	Majestic Princess	Mon	Mar-14-2022	7:00 AM	Los Angeles	Mon	Mar-14-2022	10:00 PM	Santa Barbara	Pier 27	Princess	Metro	Transit	1083'	3,560	
8	Koningsdam	Wed	Mar-23-2022	11:00 AM	Ensenada	Thu	Mar-24-2022	4:00 PM	Catalina	Pier 27	Holland America	Metro	Transit	975'	2,650	
9	Ruby Princess	Sun	Mar-27-2022	7:00 AM	Cabo San Lucas	Sun	Mar-27-2022	4:00 PM	Kahului	Pier 27	Princess	Metro	Full Turn	951'	3,080	
10	Majestic Princess	Mon	Mar-28-2022	7:00 AM	Los Angeles	Mon	Mar-28-2022	10:00 PM	Santa Barbara	Pier 27	Princess	Metro	Transit	1083'	3,560	
11	Koningsdam	Wed	Mar-30-2022	1:00 PM	Santa Barbara	Wed	Mar-31-2022	11:00 PM	Ensenada	Pier 27	Holland America	Metro	Transit	975'	2,650	
12	Caribbean Princess	Sun	Apr-03-2022	7:00 AM	Cabo San Lucas	Sun	Apr-03-2022	4:00 PM	Astoria	Pier 27	Princess	Metro	Full Turn	951'	3,142	
13	Discovery Princess	Tue	Apr-05-2022	7:00 AM	Los Angeles	Tue	Apr-05-2022	10:00 PM	Santa Barbara	Pier 27	Princess	Metro	Transit	1083'	3,600	
14	Koningsdam	Tue	Apr-05-2022	1:00 PM	Santa Barbara	Wed	Apr-06-2022	6:00 PM	Astoria	Pier 35S	Holland America	Metro	Transit	975'	2,650	
	EVENT	Fri	Apr-08-2022			Sat	Apr-09-2022			Pier 27						
15	Majestic Princess	Mon	Apr-11-2022	7:00 AM	Los Angeles	Mon	Apr-11-2022	10:00 PM	Santa Barbara	Pier 27	Princess	Metro	Transit	1083'	3,560	
16	Ruby Princess	Mon	Apr-11-2022	7:00 AM	Ensenada	Mon	Apr-11-2022	4:00 PM	San Diego	Pier 35S	Princess	Metro	Full Turn	951'	3,080	
17	Viking Orion	Wed	Apr-13-2022	7:00 AM		Wed	Apr-13-2022	6:00 PM		Pier 35S	Viking	SMS	Transit	745'	930	
	EVENT	Wed	Apr-13-2022			Thu	Apr-14-2022			Pier 27						
18	Ruby Princess	Sat	Apr-16-2022	7:00 AM	Ensenada	Sat	Apr-16-2022	4:00 PM	Santa Barbara	Pier 27	Princess	Metro	Full Turn	951'	3,080	
19	Norwegian Bliss	Mon	Apr-18-2022	2:30 PM	Los Angeles	Mon	Apr-18-2022	9:00 PM	Victoria	Pier 27	Norwegian	SMS	Transit	1069'	4,250	
20	Discovery Princess	Tue	Apr-19-2022	7:00 AM	Los Angeles	Tue	Apr-19-2022	10:00 PM	Santa Barbara	Pier 27	Princess	Metro	Transit	1083'	3,600	
21	Viking Orion	Thu	Apr-21-2022	8:00 AM	Astoria	Thu	Apr-21-2022	11:00 AM	Santa Barbara	Pier 27	Vikina	SMS	Transit	745'	930	
22	Ruby Princess	Sat	Apr-23-2022	7:00 AM	Ensenada	Sat	Apr-23-2022	4:00 PM	Astoria	Pier 27	Princess	Metro	Full Turn	951'	3.080	
23	Disney Wonder	Sat	Apr-23-2022	7:00 AM	San Diego	Sat	Apr-23-2022	4:00 PM	Victoria	Pier 35S	Disney	Metro	Transit	965'	1,750	
24	Maiestic Princess	Mon	Apr-25-2022	7:00 AM	Los Angeles	Mon	Apr-25-2022	10:00 PM	Santa Barbara	Pier 27	Princess	Metro	Transit	1083'	3.560	
25	Radiance of the Seas	Mon	Apr-25-2022	11:00 AM	Santa Barbara	Tue	Apr-26-2022	6:00 PM	Victoria	Pier 35S	Royal Caribbean	Intercruises	Transit	961'	2,143	
26	Caribbean Princess	Tue	Apr-26-2022	7:00 AM	Portland	Tue	Apr-26-2022	4:00 PM	Cabo San Lucas	Pier 27	Princess	Metro	Full Turn	951'	3.142	-
27	Carnival Miracle	Thu	Apr-28-2022	11:00 AM	Los Angeles	Thu	Apr-28-2022	11:00 PM	Ensenada	Pier 27	Carnival	Metro	Full Turn	963'	2,124	-
28	Viking Orion	Fri	Apr-29-2022	8:00 AM		Fri	Apr-29-2022	8:00 PM		Pier 27	Viking	SMS	Transit	745'	930	
29	Regatta	Fri	Apr-29-2022	8:00 AM	San Diego	Sat	Apr-30-2022	9:00 PM	Monterey	Pier 35S	Oceania	SMS	Transit	594'	684	
30	Ruby Princess	Sat	Apr-30-2022	7:30 AM	Victoria	Sat	Apr-30-2022	4:00 PM	Juneau	Pier 27	Princess	Metro	Full Turn	951'	3.080	
31	Discovery Princess	Sun	May-01-2022	7:00 AM	Los Angeles	Sun	May-01-2022	6:00 PM	Victoria	Pier 27	Princess	Metro	Transit	1083'	3,600	
32	Carnival Miracle	Mon	May-02-2022	7:00 AM	Ensenada	Mon	May-02-2022	4:00 PM	Icv Strait Point	Pier 27	Carnival	Metro	Full Turn	963'	2,124	
33	Maiestic Princess	Tue	May-02-2022 May-03-2022	7:00 AM	San Diego	Mon	May-03-2022	4.00 PM	Astoria	Pier 27	Princess	Metro	Transit	1083'	3,560	
34	Seven Seas Mariner	Wed	May-03-2022	7:00 PM	Vancouver	Thu	May-05-2022	7:00 PM	Astoria	Pier 35S	Regent	SMS	Transit	713'	708	
35	Norwegian Encore	Wed	May-04-2022	3:00 AM	Los Angeles	Thu	May-05-2022 May-05-2022	6:00 PM	Victoria	Pier 27	Norwegian	SMS	Transit	1094'	3.998	
36	Celebrity Millennium	Sat	May-04-2022 May-07-2022	3:00 AM	Monterev	Sun	May-05-2022 May-08-2022	5:00 PM	Astoria	Pier 27	Celebrity	Intercruises	Transit	965'	2,138	
30	Ruby Princess	Tue		7:00 AM				4:00 PM		Pier 27 Pier 27	Princess	Metro			-1.00	
37	Carnival Miracle	Tue	May-10-2022	7:00 AM 7:00 AM	Victoria Victoria	Tue Thu	May-10-2022	4:00 PM 4:00 PM	Juneau Ensenada	Pier 27 Pier 27	Carnival	Metro	Full Turn Full Turn	951' 963'	3,080	
38			May-12-2022	7:00 AM	victória		May-12-2022	4:00 PM	Ensenada		Carnival	wetro	Full Lurn	963	2,124	
	EVENT	Fri	May-13-2022	0.02.11/		Fri	May-13-2022	0.00 517	A - 4 - 4 -	Pier 27	O	Child	Trees	50.1	<u></u>	
39	Regatta	Sun	May-15-2022	8:00 AM	Los Angeles	Sun	May-15-2022	6:00 PM	Astoria	Pier 27	Oceania	SMS	Transit	594'	684	
40	Carnival Miracle	Mon	May-16-2022	7:00 AM	Ensenada	Mon	May-16-2022	4:00 PM	Icy Strait Point	Pier 27	Carnival	Metro	Full Turn	963'	2,124	
	EVENT	Tue	May-17-2022			Wed	May-18-2022			Pier 27						
41	Ruby Princess	Fri	May-20-2022	7:00 AM	Victoria	Fri	May-20-2022	4:00 PM	Icy Strait Point	Pier 27	Princess	Metro	Full Turn	951'	3,080	



(Updated Sep-02-2022)



N	lo.	Vessel	ETA Dav	Date	Time	Last Port	ETD Day	Date	Time	Next Port	Berth	Cruise Line	Port Agent	Туре	Length	Passengers	
	2		Sat	May-21-2022	1:00 PM	Santa Barbara	Sun	May-22-2022	5:00 PM	Seattle	Pier 27	Seabourn	Metro	Transit	650'	450	
4	_	Seabourn Odyssey EVENT	Mon	May-21-2022 May-23-2022	1.00 PW	Sania Daibara	Fri	May-27-2022 May-27-2022	5.00 PW	Seallie	Pier 35S	Seabourn	Metro	Transit	650	430	
	_				7 00 111				4.00 014	0 / F		a · .			0001	0.404	
4	-	Carnival Miracle	Thu	May-26-2022	7:00 AM	Victoria	Thu	May-26-2022	4:00 PM	Catalina	Pier 27	Carnival	Metro	Full Turn	963'	2,124	
	_	EVENT	Fri	May-27-2022			Sun	May-29-2022			Pier 27						
4	4	Ruby Princess	Mon	May-30-2022	7:00 AM	Victoria	Mon	May-30-2022	4:00 PM	Juneau	Pier 27	Princess	Metro	Full Turn	951'	3,080	
		EVENT	Tue	May-31-2022			Wed	Jun-01-2022			Pier 35S						
	15	Carnival Miracle	Tue	May-31-2022	7:00 AM	Victoria	Tue	May-31-2022	4:00 PM	Sitka	Pier 27	Carnival	Metro	Full Turn	963'	2,124	
4	-	Queen Elizabeth	Wed	Jun-01-2022	7:00 AM	Los Angeles	Wed	Jun-01-2022	10:00 PM	Vancouver	Pier 27	Carnival UK	Inchcape	Transit	965'	2,547	
	_	EVENT	Tue	Jun-07-2022			Wed	Jun-08-2022			Pier 27						l
		Ruby Princess	Thu	Jun-09-2022	7:00 AM	Victoria	Thu	Jun-09-2022	4:00 PM	Juneau	Pier 27	Princess	Metro	Full Turn	951'	3,080	ł
4	-	Carnival Miracle	Fri	Jun-10-2022	7:00 AM	Victoria	Fri	Jun-10-2022	4:00 PM	Sitka	Pier 27	Carnival	Metro	Full Turn	963'	2,124	<u> </u>
	_	EVENT	Mon	Jun 13-2022			Wed	Jun-15-2022			Pier 27						<u> </u>
		Ruby Princess	Sun	Jun-19-2022	7:00 AM	Victoria	Sun	Jun-19-2022	4:00 PM	Ketchikan	Pier 27	Princess	Metro	Full Turn	951'	3,080	1
		Carnival Miracle	Mon	Jun-20-2022	7:00 AM	Victoria	Mon	Jun-20-2022	4:00 PM	Juneau	Pier 27	Carnival	Metro	Full Turn	963'	2,124	1
5	_	Ruby Princess	Wed	Jun-29-2022	7:00 AM	Victoria	Wed	Jun-29-2022	4:00 PM	Icy Strait Point	Pier 27	Princess	Metro	Full Turn	951'	3,080	1
	_	Carnival Miracle	Thu	Jun-30-2022	7:00 AM	Victoria	Thu	Jun-30-2022	4:00 PM	San Diego	Pier 27	Carnival	Metro	Full Turn	963'	2,124	1
5	53	Carnival Miracle	Tue	Jul-05-2022	7:00 AM	Ensenada	Tue	Jul-05-2022	4:00 PM	Juneau	Pier 27	Carnival	Metro	Full Turn	963'	2,124	1
	_	EVENT	Wed	Jul-6-2022			Wed	Jul-6-2022			Pier 35S						I
	54	Ruby Princess	Sat	Jul-09-2022	7:00 AM	Victoria	Sat	Jul-09-2022	4:00 PM	Ketchikan	Pier 27	Princess	Metro	Full Turn	951'	3,080	l
	55	Carnival Miracle	Fri	Jul-15-2022	7:00 AM	Victoria	Fri	Jul-15-2022	4:00 PM	Icy Strait Point	Pier 27	Carnival	Metro	Full Turn	963'	2,124	I
5	6	Ruby Princess	Tue	Jul-19-2022	7:00 AM	Victoria	Tue	Jul-19-2022	4:00 PM	Icy Strait Point	Pier 27	Princess	Metro	Full Turn	951'	3,080	I
		EVENT	Wed	Jul-20-2022			Sat	Jul-23-2022			Pier 27						I
		Queen Elizabeth	Sun	Jul-24-2022	6:00 AM	Vancouver	Sun	Jul-24-2020	8:30 PM	Los Angeles	Pier 27	Carnival UK	Inchcape	Transit	965'	2,092	I
	-	Carnival Miracle	Mon	Jul-25-2022	7:00 AM	Victoria	Mon	Jul-25-2022	4:00 PM	Icy Strait Point	Pier 27	Carnival	Metro	Full Turn	963'	2,124	I
	-	Ruby Princess	Fri	Jul-29-2022	7:00 AM	Victoria	Fri	Jul-29-2022	4:00 PM	Ketchikan	Pier 27	Princess	Metro	Full Turn	951'	3,080	I
	-	Carnival Miracle	Thu	Aug-04-2022	7:00 AM	Victoria	Thu	Aug-04-2022	4:00 PM	Ensenada	Pier 27	Carnival	Metro	Full Turn	963'	2,124	I
		Ruby Princess	Mon	Aug-08-2022	7:00 AM	Victoria	Mon	Aug-08-2022	4:00 PM	Juneau	Pier 27	Princess	Metro	Full Turn	951'	3,080	I
6	62	Carnival Miracle	Mon	Aug-08-2022	7:00 AM	Ensenada	Mon	Aug-08-2022	4:00 PM	Juneau	Pier 35S	Carnival	Metro	Full Turn	963'	2,124	I
6	63	Ruby Princess	Thu	Aug-18-2022	7:00 AM	Victoria	Thu	Aug-18-2022	4:00 PM	Juneau	Pier 27	Princess	Metro	Full Turn	951'	3,080	I
6	64	Carnival Miracle	Thu	Aug-18-2022	7:00 AM	Victoria	Thu	Aug-18-2022	4:00 PM	Ensenada	Pier 35S	Carnival	Metro	Full Turn	963'	2,124	I
	1	EVENT	Sat	Aug-20-2022			Sun	Aug-21-2022			Pier 27						I
6	65	Carnival Miracle	Mon	Aug-22-2022	7:00 AM	Ensenada	Mon	Aug-22-2022	4:00 PM	Icy Strait Point	Pier 27	Carnival	Metro	Full Turn	963'	2,124	I
6	6	Ruby Princess	Sun	Aug-28-2022	7:00 AM	Victoria	Sun	Aug-28-2022	4:00 PM	Sitka	Pier 27	Princess	Metro	Full Turn	951'	3,080	I
6	67	Carnival Miracle	Thu	Sep-01-2022	7:00 AM	Victoria	Thu	Sep-01-2022	4:00 PM	Ensenada	Pier 27	Carnival	Metro	Full Turn	963'	2,124	I
		Carnival Miracle	Mon	Sep-05-2022	7:00 AM	Ensenada	Mon	Sep-05-2022	4:00 PM	Juneau	Pier 27	Carnival	Metro	Full Turn	963'	2,124	I
6		Ruby Princess	Wed	Sep-07-2022	7:00 AM	Victoria	Wed	Sep-07-2022	4:00 PM	Icy Strait Point	Pier 27	Princess	Metro	Full Turn	951'	3,080	I
		EVENT	Fri	Sep-09-2022			Sat	Sep-10-2022			Pier 27						I
		EVENT	Sat	Sep-10-2022			Sat	Sep-10-2022			Pier 35S						I
	0	Regatta	Mon	Sep-12-2022	8:00 AM	Ensenada	Tue	Sep-13-2022	5:00 PM	Santa Barbara	Pier 27	Oceania	SMS	Transit	594'	684	I
	_	Carnival Miracle	Thu	Sep-15-2022	7:00 AM	Victoria	Thu	Sep-15-2022	4:00 PM	Nawiliwilli, HI	Pier 27	Carnival	Metro	Disembark	963'	2,124	I
		Star Breeze	Fri	Sep-16-2022	7:00 AM		Fri	Sep-16-2022	5:00 PM		Pier 27	Windstar	Intercruises	Transit	524'	312	i
7	'3	Ruby Princess	Sat	Sep-17-2022	7:00 AM	Victoria	Sat	Sep-17-2022	4:00 PM	Astoria	Pier 27	Princess	Metro	Full Turn	951'	3,080	I
		EVENT	Sun	Sep-18-2022			Sun	Sep-19-2022			Pier 27						i
7	4	Celebrity Solstice	Tue	Sep-20-2022	8:00 AM		Tue	Sep-20-2022	5:00 PM		Pier 27	Celebrity	Intercruises	Transit	965'	2,138	I
7	′5	Regatta	Wed	Sep-21-2022	8:00 AM	Ensenada	Thu	Sep-22-2022	9:00 PM		Pier 30-32	Oceania	SMS	Transit	594'	684	I
*		EVENT	Wed	Sep-21-2022			Thu	Sep-22-2022			Pier 27						I
7	6	Ruby Princess	Sat	Sep-24-2022	7:00 AM	Victoria	Sat	Sep-24-2022	4:00 PM	Astoria	Pier 27	Princess	Metro	Full Turn	951'	3,080	I
7	7	Scenic Eclipse	Sun	Sep-25-2022	9:00 AM	Eureka	Mon	Sep-26-2022	11:00 PM	Monterey	Pier 30-32	Scenic	Intercruises	Transit	545'	228	i
7	'8	Crown Princess	Sun	Sep-25-2022	7:00 AM	Vancouver	Sun	Sep-25-2022	10:00 PM	San Diego	Pier 27	Princess	Metro	Transit	951'	3,080	i
7	'9	Royal Princess	Tue	Sep-27-2022	7:00 AM	Vancouver	Tue	Sep-27-2022	4:00 PM	Puerto Vallarta	Pier 27	Princess	Metro	Full Turn	1,083'	3,600	i
8	30	Discovery Princess	Wed	Sep-28-2022	7:00 AM	Vancouver	Wed	Sep-28-2022	10:00 PM	Santa Barbara	Pier 27	Princess	Metro	Transit	1083'	3,600	1



(Updated Sep-02-2022)



	No.	Vessel	ETA Day	Date	Time	Last Port	ETD Day	Date	Time	Next Port	Berth	Cruise Line	Port Agent	Type	Length	Passengers	
*	81	Celebrity Millennium	Wed	Sep-28-2022	7:00 AM		Wed	Sep-28-2022	6:00 PM		Pier 35S	Celebrity	Intercruises	Transit	965'	2.138	
	82	Grand Princess	Thu	Sep-29-2022	7:00 AM	Astoria	Thu	Sep-29-2022	10:00 PM	Santa Barbara	Pier 27	Princess	Metro	Transit	951'	2,600	1
	83	Serenade of the Seas	Thu	Sep-29-2022	8:00 AM	Astoria	Fri	Sep-30-2022	4:00 PM	Los Angeles	Pier 35S	Royal Caribbean	Intercruises	Transit	962'	2,490	1
	84	Carnival Miracle	Fri	Sep-30-2022	7:00 AM	Ensenada	Fri	Sep-30-2022	12:00 PM	Los Angeles	Pier 27	Carnival	Metro	Disembark	963'	2,124	
		SF FLEET WEEK	Fri	Sep-30-2022			Mon	Oct-10-2022			Pier 30-32						
	85	Ruby Princess	Sat	Oct-01-2022	7:00 AM	Victoria	Sat	Oct-01-2022	4:00 PM	Santa Barbara	Pier 27	Princess	Metro	Full Turn	951'	3,080	,
	86	Zuiderdam	Sat	Oct-01-2022	8:00 AM	Vancouver	Sat	Oct-01-2022	5:00 PM	San Diego	Pier 35S	Holland America	Metro	Transit	936'	1,964	
	87	Seven Seas Mariner	Sat	Oct-01-2022	8:00 AM	Tanoouror	Sat	Oct-01-2022	6:00 PM	our blogo	Pier 35N	Regent	SMS	Transit	713'	708	
	0,	SF FLEET WEEK	Sun	Oct-02-2022	0.007411		Mon	Oct-10-2022	0.001 11		Pier 35S	Rogon	omo	Tranton	110	100	
	88	Discovery Princess	Mon	Oct-03-2022	7:00 AM	Los Angeles	Mon	Oct-03-2022	10:00 PM	Santa Barbara	Pier 27	Princess	Metro	Transit	1083'	3.660	1
	89	Nieuw Amsterdam	Wed	Oct-05-2022	8:00 AM	Vancouver	Wed	Oct-05-2022	11:00 PM	Catalina	Pier 27	Holland America	Metro	Transit	936'	2,106	
*	90	Noordam	Thu	Oct-06-2022	7:00 AM		Thu	Oct-06-2022	4:00 PM		Pier 27	Holland America	Metro	Transit	936'	1.964	
	91	Ruby Princess	Sat	Oct-08-2022	7:00 AM	Ensenada	Sat	Oct-08-2022	4:00 PM	Honolulu	Pier 27	Princess	Metro	Full Turn	951'	3.080	
	92	Roval Princess	Sun	Oct-09-2022	7:00 AM		Sun	Oct-09-2022	4:00 PM		Pier 27	Princess	Metro	Full Turn	1.083'	3.600	,
		Seven Seas Mariner	Wed	Oct-12-2022	8:00 AM	Ensenada	Thu	Oct-13-2022	5:00 PM	Santa Barbara	Pier 27	Regent	SMS	Transit	713'	708	·
*		Silver Wind	Wed	Oct-12-2022	1:00 PM		Thu	Oct-13-2022	10:00 PM		Pier 35S	Silversea	Inchcape	Transit	511'	294	·
		EVENT	Fri	Oct-14-2022			Sat	Oct-15-2022			Pier 27						
	95	Roval Princess	Sun	Oct-16-2022	7:00 AM		Sun	Oct-16-2022	4:00 PM		Pier 27	Princess	Metro	Full Turn	1.083'	3,600	1
	96	Discovery Princess	Tue	Oct-17-2022	7:00 AM	Los Angeles	Tue	Oct-17-2022	10:00 PM	Santa Barbara	Pier 27	Princess	Metro	Transit	1083'	3,660	1
	97	Norwegian Jewel	Tue	Oct-17-2022	8:00 AM	Ketchikan, AK	Tue	Oct-17-2022	8:00 PM	Los Angeles	Pier 35S	Norwegian	SMS	Transit	965'	2,376	1
		EVENT	Tue	Oct-18-2022			Wed	Oct-19-2022			Pier 27						,
	98	Royal Princess	Sun	Oct-23-2022	7:00 AM		Sun	Oct-23-2022	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,600	1
	99	Ruby Princess	Sun	Oct-23-2022	7:00 AM	Ensenada	Sun	Oct-23-2022	4:00 PM	Honolulu	Pier 35S	Princess	Metro	Full Turn	951'	3,080	,
	100	Norwegian Encore	Tue	Oct-25-2022	12:00 PM	Seattle	Tue	Oct-25-2022	9:00 PM	Los Angeles	Pier 27	Norwegian	SMS	Transit	1094'	3,998	1
	101	Koningsdam	Thu	Oct-27-2022	8:00 AM	Victoria	Thu	Oct-27-2022	11:00 PM	San Diego	Pier 27	Holland America	Metro	Transit	975'	2,650	. I
		EVENT	Fri	Oct-28-2022			Sat	Oct-29-2022			Pier 27						1
	102	Royal Princess	Sun	Oct-30-2022	7:00 AM		Sun	Oct-30-2022	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,600	1
		EVENT	Wed	Nov-03-2022			Wed	Nov-03-2022			Pier 27						1
•		EVENT	Thu	Nov-04-2022			Fri	Nov-05-2022			Pier 27						1
	103	Royal Princess	Sun	Nov-06-2022	7:00 AM		Sun	Nov-06-2022	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,600	1
	104	Crown Princess	Sun	Nov-06-2022	7:00 AM	Astoria	Sun	Nov-06-2022	10:00 PM	Santa Barbara	Pier 35S	Princess	Metro	Transit	951'	3,080	
	105	Ruby Princess	Mon	Nov-07-2022	7:00 AM	Ensenada	Mon	Nov-07-2022	4:00 PM	Hilo	Pier 27	Princess	Metro	Full Turn	951'	3,080	
	106	Koningsdam	Tue	Nov-08-2022	1:00 PM	Santa Barbara	Wed	Nov-09-2022	11:00 PM	Ensenada	Pier 27	Holland America	Metro	Transit	975'	2,650	
*		EVENT	Fri	Nov-11-2022			Sun	Nov-13-2022			Pier 35S						ļ
	107	Royal Princess	Sun	Nov-13-2022	7:00 AM	Ensenada	Sun	Nov-13-2022	4:00 PM	Puerto Vallarta	Pier 27	Princess	Metro	Full Turn	1,083'	3,600	
*		EVENT	Mon	Nov-14-2022			Fri	Nov-18-2022			Pier 27						I
	108	Ruby Princess	Tue	Nov-22-2022	7:00 AM	Ensenada	Tue	Nov-22-2022	4:00 PM	Puerto Vallarta	Pier 27	Princess	Metro	Full Turn	951'	3,080	I
	109	Royal Princess	Wed	Nov-23-2022	7:00 AM	Cabo San Lucas	Wed	Nov-23-2022	4:00 PM	Ensenada	Pier 27	Princess	Metro	Full Turn	1,083'	3,600	I
	110	Royal Princess	Sun	Nov-27-2022	7:00 AM	San Diego	Sun	Nov-27-2022	4:00 PM	Kona, HI	Pier 27	Princess	Metro	Full Turn	1,083'	3,600	I
	111	Ruby Princess	Fri	Dec-02-2022	7:00 AM	Cabo San Lucas	Fri	Dec-02-2022	4:00 PM	Huatulco, MX	Pier 27	Princess	Metro	Full Turn	951'	3,080	I
		EVENT	Fri	Dec-09-2022			Fri	Dec-09-2022			Pier 27						ļ
		EVENT	Sat	Dec-10-2022			Sun	Dec-11-2022			Pier 27						I
	112	Royal Princess	Mon	Dec-12-2022	7:00 AM	Ensenada	Mon	Dec-12-2022	4:00 PM	Puerto Vallarta	Pier 27	Princess	Metro	Full Turn	1,083'	3,600	1
	113	Royal Princess	Thu	Dec-22-2022	7:00 AM	Cabo San Lucas	Thu	Dec-22-2022	4:00 PM	Honolulu	Pier 27	Princess	Metro	Full Turn	1,083'	3,600	1
																	ı —
		Bold=overnight call		Yellow=Multiple ships				Yellow=Multiple ship	os		Orange = Pier 35S						ı —
*		Added/Changed									Purple = Pier 35N						ı —
		Pending.not confirmed									Blue = Pier 30-32		1	1			ı



No.	Vessel	ETA Day	Date	Time	Last Port	ETD Day	Date	Time	Next Port	Berth	Cruise Line	Port Agent	Туре	Length	Passenge
1	Royal Princess	Fri	Jan-06-2023	7:00 AM		Fri	Jan-06-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,600
2	Insignia	Sun	Jan-15-2023	6:00 AM		Sun	Jan-15-2023	11:00 PM		Pier 27	Oceania	SMS	Transit	592'	698
3	Royal Princess	Mon	Jan-16-2023	7:00 AM		Mon	Jan-16-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,600
	EVENT	Fri	Jan-20-2023			Sun	Jan-22-2023								
4	Royal Princess	Tue	Jan-31-2023	7:00 AM		Tue	Jan-31-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,600
5	MSC Poesia	Sun	Feb-05-2023	7:00 AM		Mon	Feb-06-2023	5:00 PM		Pier 27	MSC	Norton Lilly	Transit	964'	3,223
6	Queen Victoria	Mon	Feb-06-2023	6:00 AM		Tue	Feb-07-2023	8:00 PM		Pier 35S	Carnival UK	Inchcape	Partial Turn	965'	2,014
7	Royal Princess	Fri	Feb-10-2023	7:00 AM		Wed	Feb-10-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,600
8	Royal Princess	Sat	Feb-25-2023	7:00 AM		Sat	Feb-25-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,600
9	Royal Princess	Thu	Mar-02-2023	7:00 AM		Thu	Mar-02-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,600
	EVENT														
10	Royal Princess	Sun	Mar-12-2023	7:00 AM		Sun	Mar-12-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,600
11	Discovery Princess	Mon	Mar-13-2023	7:00 AM		Mon	Mar-13-2023	10:00 PM		Pier 27	Princess	Metro	Transit	1083'	3,660
	EVENT														
	EVENT														
12	Solstice		Mar-26-2023							Pier 27					
13	Royal Princess	Mon	Mar-27-2023	7:00 AM		Mon	Mar-27-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,60
14	Discovery Princess	Tue	Mar-28-2023	7:00 AM		Tue	Mar-28-2023	10:00 PM		Pier 27	Princess	Metro	Transit	1083'	3,66
	EVENT														
15	Celebrity Solstice	Sun	Apr-02-2023	11:00 PM		Mon	Apr-03-2023	5:00 PM		Pier 27	Celebrity	Intercruises	Transit	1,041	2,852
16	Koningsdam	Tue	Apr-04-2023	1:00 PM		Wed	Apr-05-2023	6:00 PM		Pier 27	Holland America	Metro	Transit	975'	2,65
	Sapphire Princess	Sat	Apr-08-2023	7:00 AM		Sat	Apr-08-2023	6:00 PM		Pier 27	Princess	Metro	Transit	952'	2,67
	Discovery Princess	Mon	Apr-10-2023	7:00 AM		Mon	Apr-10-2023	10:00 PM		Pier 27	Princess	Metro	Transit	1083'	3,66
19	Viking Star	Tue	Apr-11-2023	7:00 AM		Tue	Apr-11-2023	6:00 PM		Pier 35S	Viking	SMS	Transit	748'	930
20	Royal Princess	Tue	Apr-11-2023	7:00 AM		Tue	Apr-11-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,60
	Royal Princess	Sun	Apr-16-2023	7:00 AM		Sun	Apr-16-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,60
22	Borealis	Mon	Apr-17-2023	7:30 AM		Mon	Apr-17-2023	11:00 PM		Pier 35S	Olsen	Inchcape	Transit	780'	1,36
23	Norwegian Joy	Tue	Apr-18-2023	8:00 AM		Tue	Apr-18-2023	6:00 PM		Pier 27	Norwegian	SMS	Transit	1094'	3,80
24	Viking Star	Wed	Apr-19-2023	8:00 AM		Wed	Apr-19-2023	11:00 PM		Pier 27	Viking	SMS	Transit	748'	930
25	Enchantment of the Seas	Thu	Apr-20-2023	7:00 AM		Thu	Apr-20-2023	7:00 PM		Pier 27	Royal Carribbean	Intercruises	Transit	990'	2,44
26	Royal Princess	Sun	Apr-23-2023	7:00 AM		Sun	Apr-23-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,60
27	Carnival Miracle	Sun	Apr-23-2023	1:00 PM		Sun	Apr-23-2023	4:00 PM		Pier 35S	Carnival	Metro	Embark	963'	2,12
28	Celebrity Solstice	Tue	Apr-25-2023	8:00 AM		Wed	Apr-26-2023	6:00 PM		Pier 27	Celebrity	Intercruises	Transit	1,041	2,85
29	Viking Star	Thu	Apr-27-2023	7:00 AM		Thu	Apr-27-2023	6:00 PM		Pier 35S	Viking	SMS	Transit	748'	930
30	Carnival Miracle	Thu	Apr-27-2023	7:00 AM		Thu	Apr-27-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,12
31	Grand Princess	Fri	Apr-28-2023	7:00 AM		Fri	Apr-28-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	2,60
32	Ruby Princess	Sun	Apr-30-2023	7:00 AM		Sun	Apr-30-2023	4:00 PM		Pier 35S	Princess	Metro	Full Turn	951'	3,08
33	Royal Princess	Sun	Apr-30-2023	7:00 AM		Sun	Apr-30-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	1,083'	3,600
34	Carnival Miracle	Mon	May-01-2023	7:00 AM		Mon	May-01-2023	4:00 PM		Pier 27	Carnival	google\	Full Turn	963'	2,12
35	Norwegian Encore	Wed	May-03-2023	8:00 AM		Wed	May-03-2023	7:00 PM		Pier 27	Norwegian	SMS	Transit	1094'	3,998
36	Scenic Eclipse 2	Sat	May-06-2023	8:00 AM	Monterey	Sat	May-06-2023	6:00 PM	Eureka	Pier 30-32	Scenic	Intercruises	Transit	551'	228
37	Ruby Princess	Sun	May-07-2023	7:00 AM	-	Sun	May-07-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	3,08
38	Oceania Regatta	Sun	May-07-2023	8:00 AM		Mon	May-08-2023	9:00 PM		Pier 30-32	Oceania	SMS	Transit	595'	684
39	Celebrity Millennium	Mon	May-08-2023	8:00 AM		Tue	May-09-2023	6:00 PM		Pier 27	Celebrity	Intercruises	Transit	965'	2,13
40	Carnival Miracle	Thu	May-11-2023	7:00 AM		Thu	May-11-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,12
	EVENT														
	Oceania Regatta	Sun	May-14-2023	8:00 AM		Mon	May-15-2023	9:00 PM		Pier 30-32	Oceania	SMS	Transit	595'	684
41	Carnival Miracle	Mon	May-15-2023	7:00 AM		Mon	May-15-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,12
						INOT	Way-13-2023	4.00 F M							3,08
42	Ruby Princess	Wed	May-17-2023	7:00 AM		Wed	May-17-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	
42 43	Ruby Princess Oceania Regatta	Wed Sat	May-17-2023 May-20-2023	7:00 AM 8:00 AM							Princess Oceania	Metro SMS	Full Turn Transit	951' 595'	684
42 43 44						Wed	May-17-2023	4:00 PM		Pier 27					
42 43 44 45	Oceania Regatta	Sat	May-20-2023	8:00 AM		Wed Sat	May-17-2023 May-20-2023	4:00 PM 6:00 PM		Pier 27 Pier 27	Oceania	SMS	Transit	595'	2,12
42 43 44 45 46	Oceania Regatta Carnival Miracle	Sat Thu	May-20-2023 May-25-2023	8:00 AM 7:00 AM		Wed Sat Thu	May-17-2023 May-20-2023 May-25-2023	4:00 PM 6:00 PM 4:00 PM		Pier 27 Pier 27 Pier 27	Oceania Carnival	SMS Metro	Transit Full Turn	595' 963'	2,12 3,08
42 43 44 45 46 47	Oceania Regatta Carnival Miracle Ruby Princess	Sat Thu Sat	May-20-2023 May-25-2023 May-27-2023	8:00 AM 7:00 AM 7:00 AM		Wed Sat Thu Sat	May-17-2023 May-20-2023 May-25-2023 May-27-2023	4:00 PM 6:00 PM 4:00 PM 4:00 PM		Pier 27 Pier 27 Pier 27 Pier 27 Pier 27	Oceania Carnival Princess	SMS Metro Metro	Transit Full Turn Full Turn	595' 963' 951'	2,12 3,08 2,12
42 43 44 45 46 47 48	Oceania Regatta Carnival Miracle Ruby Princess Carnival Miracle	Sat Thu Sat Mon	May-20-2023 May-25-2023 May-27-2023 May-29-2023	8:00 AM 7:00 AM 7:00 AM 7:00 AM		Wed Sat Thu Sat Mon	May-17-2023 May-20-2023 May-25-2023 May-27-2023 May-29-2023	4:00 PM 6:00 PM 4:00 PM 4:00 PM 4:00 PM		Pier 27 Pier 27 Pier 27 Pier 27 Pier 27 Pier 27	Oceania Carnival Princess Carnival	SMS Metro Metro Metro	Transit Full Turn Full Turn Full Turn	595' 963' 951' 963'	2,12 3,08 2,12 3,08
42 43 44 45 46 47 48 49	Oceania Regatta Carnival Miracle Ruby Princess Carnival Miracle Ruby Princess	Sat Thu Sat Mon Tue	May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023	8:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM		Wed Sat Thu Sat Mon Tue	May-17-2023 May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023	4:00 PM 6:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM		Pier 27 Pier 27 Pier 27 Pier 27 Pier 27 Pier 27 Pier 27	Oceania Carnival Princess Carnival Princess	SMS Metro Metro Metro Metro	Transit Full Turn Full Turn Full Turn Full Turn	595' 963' 951' 963' 951'	2,12 3,08 2,12 3,08 2,12
42 43 44 45 46 47 48 49 50	Oceania Regatta Carnival Miracle Ruby Princess Carnival Miracle Ruby Princess Carnival Miracle	Sat Thu Sat Mon Tue Thu	May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023	8:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM		Wed Sat Thu Sat Mon Tue Thu	May-17-2023 May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023	4:00 PM 6:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM		Pier 27 Pier 27 Pier 27 Pier 27 Pier 27 Pier 27 Pier 27 Pier 27	Oceania Carnival Princess Carnival Princess Carnival	SMS Metro Metro Metro Metro Metro	Transit Full Turn Full Turn Full Turn Full Turn Full Turn	595' 963' 951' 963' 951' 963'	2,12 3,08 2,12 3,08 2,12 2,12 2,12
42 43 44 45 46 47 48 49 50 51	Oceania Regatta Carnival Miracle Ruby Princess Carnival Miracle Ruby Princess Carnival Miracle Carnival Miracle	Sat Thu Sat Mon Tue Thu Mon	May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023	8:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM		Wed Sat Thu Sat Mon Tue Thu Mon	May-17-2023 May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023	4:00 PM 6:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM		Pier 27 Pier 27 Pier 27 Pier 27 Pier 27 Pier 27 Pier 27 Pier 27 Pier 27	Oceania Carnival Princess Carnival Princess Carnival Carnival	SMS Metro Metro Metro Metro Metro Metro	Transit Full Turn Full Turn Full Turn Full Turn Full Turn Full Turn	595' 963' 951' 963' 951' 963' 963'	2,12 3,08 2,12 3,08 2,12 2,12 2,12 3,08
42 43 44 45 46 47 48 49 50 51 52	Oceania Regatta Carnival Miracle Ruby Princess Carnival Miracle Ruby Princess Carnival Miracle Carnival Miracle Ruby Princess	Sat Thu Sat Mon Tue Thu Mon Fri	May-20-2023 May-25-2023 May-27-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023	8:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM		Wed Sat Thu Sat Mon Tue Thu Mon Fri	May-17-2023 May-20-2023 May-25-2023 May-27-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023	4:00 PM 6:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM		Pier 27 Pier 27	Oceania Carnival Princess Carnival Princess Carnival Carnival Princess	SMS Metro Metro Metro Metro Metro Metro	Transit Full Turn Full Turn Full Turn Full Turn Full Turn Full Turn Full Turn	595' 963' 951' 963' 951' 963' 963' 951'	2,12 3,08 2,12 3,08 2,12 2,12 2,12 3,08 2,12
42 43 44 45 46 47 48 49 50 51 52	Oceania Regatta Carnival Miracle Ruby Princess Carnival Miracle Ruby Princess Carnival Miracle Carnival Miracle Ruby Princess Carnival Miracle	Sat Thu Sat Mon Tue Thu Mon Fri Sun	May-20-2023 May-25-2023 May-27-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-18-2023	8:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM		Wed Sat Thu Sat Mon Tue Thu Mon Fri Sun	May-17-2023 May-20-2023 May-25-2023 May-27-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-12-2023 Jun-16-2023 Jun-18-2023	4:00 PM 6:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM		Pier 27 Pier 27	Oceania Carnival Princess Carnival Princess Carnival Carnival Princess Carnival	SMS Metro Metro Metro Metro Metro Metro Metro Metro	Transit Full Turn Full Turn Full Turn Full Turn Full Turn Full Turn Full Turn	595' 963' 951' 963' 951' 963' 963' 951' 963'	2,12 3,08 2,12 3,08 2,12 2,12 2,12 3,08 2,12
42 43 44 45 46 47 48 49 50 51 52 53	Oceania Regatta Carnival Miracle Ruby Princess Carnival Miracle Ruby Princess Carnival Miracle Carnival Miracle Ruby Princess Carnival Miracle Carnival Miracle Carnival Miracle	Sat Thu Sat Mon Tue Thu Mon Fri Sun	May-20-2023 May-25-2023 May-27-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-18-2023	8:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM		Wed Sat Thu Sat Mon Tue Thu Mon Fri Sun	May-17-2023 May-20-2023 May-25-2023 May-27-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-12-2023 Jun-16-2023 Jun-18-2023	4:00 PM 6:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM		Pier 27 Pier 27	Oceania Carnival Princess Carnival Princess Carnival Carnival Princess Carnival	SMS Metro Metro Metro Metro Metro Metro Metro Metro	Transit Full Turn Full Turn Full Turn Full Turn Full Turn Full Turn Full Turn	595' 963' 951' 963' 951' 963' 963' 951' 963'	2,12 3,08 2,12 3,08 2,12 2,12 2,12 3,08 2,12 2,12
42 43 44 45 46 47 48 49 50 51 52 53 53 53	Oceania Regatta Carnival Miracle Ruby Princess Carnival Miracle Ruby Princess Carnival Miracle Carnival Miracle Ruby Princess Carnival Miracle Carnival Miracle Carnival Miracle EVENT	Sat Thu Sat Mon Tue Thu Mon Fri Sun Thu	May-20-2023 May-25-2023 May-27-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-16-2023 Jun-18-2023	8:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM		Wed Sat Thu Sat Mon Tue Thu Mon Fri Sun Thu	May-17-2023 May-20-2023 May-25-2023 May-27-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-16-2023 Jun-18-2023	4:00 PM 6:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM		Pier 27 Pier 27	Oceania Carnival Princess Carnival Princess Carnival Carnival Princess Carnival Carnival Carnival	SMS Metro Metro Metro Metro Metro Metro Metro Metro	Transit Full Turn Full Turn Full Turn Full Turn Full Turn Full Turn Full Turn Full Turn Full Turn	595' 963' 951' 963' 951' 963' 963' 963' 963'	2,12 3,08 2,12 3,08 2,12 2,12 3,08 2,12 2,12 2,12 3,08 3,08
42 43 44 45 46 47 48 49 50 51 52 53 52 53 54 55	Oceania Regatta Carnival Miracle Ruby Princess Carnival Miracle Ruby Princess Carnival Miracle Carnival Miracle Ruby Princess Carnival Miracle Carnival Miracle EVENT Ruby Princess	Sat Thu Sat Mon Tue Thu Mon Fri Sun Thu Thu Mon	May-20-2023 May-25-2023 May-27-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-18-2023 Jun-18-2023 Jun-22-2023	8:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM 7:00 AM		Wed Sat Thu Sat Mon Tue Thu Mon Fri Sun Thu Thu Mon	May-17-2023 May-20-2023 May-25-2023 May-27-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-18-2023 Jun-18-2023 Jun-22-2023	4:00 PM 6:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM 4:00 PM		Pier 27 Pier 27	Oceania Carnival Princess Carnival Princess Carnival Carnival Princess Carnival Carnival Carnival Princess	SMS Metro Metro Metro Metro Metro Metro Metro Metro Metro	Transit Full Turn Full Turn	595' 963' 951' 963' 951' 963' 963' 963' 963' 963' 963'	2,12 3,08 2,12 3,08 2,12 2,12 3,08 2,12 2,12 3,08 2,12 3,08 2,12
42 43 44 45 46 47 48 49 50 51 52 53 53 53 54 55 56	Oceania RegattaCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleCarnival MiracleCarnival MiracleCarnival MiracleCarnival MiracleCarnival MiracleEVENTRuby PrincessCarnival MiracleAsuka II	Sat Thu Sat Mon Tue Thu Mon Fri Sun Thu Mon Mon Wed	May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-18-2023 Jun-22-2023 Jun-22-2023 Jun-26-2023 Jun-26-2023 Jun-26-2023 Jun-28-2023	8:00 AM 7:00 AM 8:00 AM		WedSatThuSatMonTueThuMonFriSunThuMonMonWed	May-17-2023 May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-22-2023 Jun-22-2023 Jun-26-2023 Jun-26-2023 Jun-26-2023	4:00 PM 6:00 PM 4:00 PM 9:00 PM		Pier 27 Pier 35S Pier 35S	OceaniaCarnivalPrincessCarnivalPrincessCarnivalCarnivalPrincessCarnivalCarnivalPrincessCarnivalCarnivalCarnivalNYK	SMS Metro Metro Metro Metro Metro Metro Metro Metro Metro Metro General Steam	Transit Full Turn Full Turn	595' 963' 951' 963' 951' 963' 963' 963' 963' 963' 963' 963' 963	2,12 3,08 2,12 3,08 2,12 2,12 3,08 2,12 2,12 3,08 2,12 3,08 2,12 960
42 43 44 45 46 47 48 49 50 51 52 53 51 52 53 54 55 55 56 57	Oceania RegattaCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleCarnival MiracleCarnival MiracleCarnival MiracleCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleEVENTRuby PrincessCarnival MiracleAsuka IICarnival Miracle	Sat Thu Sat Mon Tue Thu Mon Fri Sun Thu Mon Mon Wed Thu	May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-18-2023 Jun-22-2023 Jun-26-2023 Jun-26-2023 Jun-28-2023 Jun-28-2023	8:00 AM 7:00 AM		WedSatThuSatMonTueThuMonFriSunThuMonWedThu	May-17-2023 May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-18-2023 Jun-22-2023 Jun-26-2023 Jun-26-2023 Jun-26-2023 Jun-28-2023 Jun-28-2023	4:00 PM 6:00 PM 4:00 PM		Pier 27 Pier 35S Pier 35S Pier 27	OceaniaCarnivalPrincessCarnivalPrincessCarnivalCarnivalCarnivalPrincessCarnivalPrincessCarnivalPrincessCarnivalNYKCarnival	SMS Metro Metro Metro Metro Metro Metro Metro Metro Metro Metro General Steam Metro	Transit Full Turn Full Turn Transit Full Turn	595' 963' 951' 963' 951' 963' 963' 963' 963' 951' 963' 951' 963' 951' 963'	2,12 3,08 2,12 3,08 2,12 2,12 3,08 2,12 2,12 2,12 3,08 2,12 960 2,12
42 43 44 45 46 47 48 49 50 51 52 53 53 53 54 55 56 57 58	Oceania RegattaCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleCarnival MiracleCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleEVENTRuby PrincessCarnival MiracleAsuka IICarnival MiracleCarnival Miracle	Sat Thu Sat Mon Tue Thu Mon Fri Sun Thu Mon Mon Wed Thu Mon	May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-22-2023 Jun-22-2023 Jun-26-2023 Jun-26-2023 Jun-28-2023 Jun-28-2023 Jun-28-2023	8:00 AM 7:00 AM		WedSatThuSatMonTueThuMonFriSunThuMonWedMonWedThuMon	May-17-2023 May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-18-2023 Jun-26-2023 Jun-26-2023 Jun-28-2023 Jun-28-2023 Jun-28-2023 Jun-28-2023	4:00 PM 6:00 PM 4:00 PM		Pier 27 Pier 35S Pier 35S Pier 27 Pier 27	OceaniaCarnivalPrincessCarnivalPrincessCarnival	SMS Metro Metro Metro Metro Metro Metro Metro Metro Metro Metro General Steam Metro Metro	TransitFull TurnFull Turn	595' 963' 951' 963' 951' 963' 963' 963' 963' 951' 963' 951' 963' 963'	2,12 3,08 2,12 3,08 2,12 2,12 3,08 2,12 2,12 3,08 2,12 960 2,12 2,12
42 43 44 45 46 47 48 49 50 51 52 53 51 52 53 53 54 55 55 55 55 56 57 58 59	Oceania RegattaCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleCarnival MiracleCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleEVENTRuby PrincessCarnival MiracleAsuka IICarnival MiracleCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleAsuka IICarnival MiracleRuby Princess	Sat Thu Sat Mon Tue Thu Mon Fri Sun Thu Mon Wed Thu Mon Thu Mon Thu	May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-18-2023 Jun-22-2023 Jun-28-2023 Jun-29-2023 Jun-28-2023 Jun-29-2023	8:00 AM 7:00 AM		WedSatThuSatMonTueThuMonFriSunThuMonWedThuMonWedThuMonThuMon	May-17-2023 May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-22-2023 Jun-26-2023 Jun-26-2023 Jun-26-2023 Jun-28-2023 Jun-29-2023 Jun-29-2023	4:00 PM 6:00 PM 4:00 PM		Pier 27 Pier 35S Pier 27 Pier 27 Pier 27 Pier 35S Pier 27 Pier 27 Pier 27 Pier 27 Pier 27 Pier 27	OceaniaCarnivalPrincessCarnivalPrincessCarnivalCarnivalCarnivalPrincessCarnivalCarnivalPrincessCarnivalNYKCarnivalCarnivalPrincess	SMS Metro Metro Metro Metro Metro Metro Metro Metro Metro General Steam Metro Metro Metro Metro	TransitFull TurnFull Turn	595' 963' 951' 963' 951' 963' 963' 963' 963' 951' 963' 790' 963' 963' 963' 963'	2,12 3,08 2,12 3,08 2,12 2,12 3,08 2,12 2,12 2,12 3,08 2,12 960 2,12 2,12 3,08
42 43 44 45 46 47 48 49 50 51 52 53 51 52 53 53 54 55 56 57 58 59 60	Oceania RegattaCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleCarnival MiracleCarnival MiracleCarnival MiracleCarnival MiracleCarnival MiracleCarnival MiracleCarnival MiracleCarnival MiracleCarnival MiracleEVENTRuby PrincessCarnival MiracleAsuka IICarnival MiracleCarnival MiracleRuby PrincessCarnival MiracleCarnival MiracleCarnival MiracleCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival Miracle	Sat Thu Sat Mon Tue Thu Mon Fri Sun Thu Mon Mon Wed Thu Mon Thu Mon Thu	May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-22-2023 Jun-22-2023 Jun-26-2023 Jun-28-2023 Jun-28-2023	8:00 AM 7:00 AM		WedSatThuSatMonTueThuMonFriSunThuMonWedThuMonWedThuMonThuMon	May-17-2023 May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-18-2023 Jun-22-2023 Jun-26-2023 Jun-26-2023 Jun-28-2023 Jun-28-2023 Jun-29-2023 Jun-29-2023 Jun-29-2023 Jun-29-2023 Jun-29-2023	4:00 PM 6:00 PM 4:00 PM		Pier 27 Pier 35S Pier 27 Pier 27 Pier 27 Pier 35S Pier 27 Pier 27 Pier 27 Pier 35S Pier 27 Pier 35S	OceaniaCarnivalPrincessCarnivalPrincessCarnivalCarnivalCarnivalCarnivalCarnivalCarnivalCarnivalCarnivalCarnivalCarnivalCarnivalCarnivalCarnivalPrincessCarnivalPrincessCarnivalPrincessCarnivalPrincessCarnivalCarnivalCarnivalCarnivalCarnivalPrincessCarnival	SMS Metro Metro Metro Metro Metro Metro Metro Metro Metro General Steam Metro Metro Metro Metro Metro	TransitFull TurnFull Turn	595' 963' 951' 963' 951' 963' 963' 963' 963' 963' 963' 963' 963	2,12 3,08 2,12 3,08 2,12 2,12 3,08 3,12
42 43 44 45 46 47 48 49 50 51 52 53 53 53 54 55 55 56 57 58 59 60 61	Oceania RegattaCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleCarnival MiracleCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleEVENTRuby PrincessCarnival MiracleAsuka IICarnival MiracleCarnival MiracleRuby PrincessCarnival MiracleRuby PrincessCarnival MiracleAsuka IICarnival MiracleRuby Princess	Sat Thu Sat Mon Tue Thu Mon Fri Sun Thu Mon Wed Thu Mon Thu Mon Thu	May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-18-2023 Jun-22-2023 Jun-28-2023 Jun-29-2023 Jun-28-2023 Jun-29-2023	8:00 AM 7:00 AM		WedSatThuSatMonTueThuMonFriSunThuMonWedThuMonWedThuMonThuMon	May-17-2023 May-20-2023 May-25-2023 May-27-2023 May-29-2023 Jun-06-2023 Jun-08-2023 Jun-12-2023 Jun-16-2023 Jun-22-2023 Jun-26-2023 Jun-26-2023 Jun-26-2023 Jun-28-2023 Jun-29-2023 Jun-29-2023	4:00 PM 6:00 PM 4:00 PM		Pier 27 Pier 35S Pier 27 Pier 27 Pier 27 Pier 35S Pier 27 Pier 27 Pier 27 Pier 27 Pier 27 Pier 27	OceaniaCarnivalPrincessCarnivalPrincessCarnivalCarnivalCarnivalPrincessCarnivalCarnivalPrincessCarnivalNYKCarnivalCarnivalPrincess	SMS Metro Metro Metro Metro Metro Metro Metro Metro Metro General Steam Metro Metro Metro Metro	TransitFull TurnFull Turn	595' 963' 951' 963' 951' 963' 963' 963' 963' 951' 963' 790' 963' 963' 963' 963'	684 2,124 3,080 2,124 3,080 2,124 3,080 2,124 3,080 2,124 3,080 2,124 960 2,124 3,080 2,124 3,080 2,124 3,080 2,124 3,080 2,124 3,080

Port of San Francisco Pier 1, The Embarcadero San Francisco, CA 94111 (415) 274-0400 www.sfport.com

Port of San Francisco 2023 Cruise Ship Schedule

(Updated Jul-22-2022)



Metro Cruise Services Pier 27, The Embarcadero San Francisco, CA 94111 (415) 231-1491 www.metrocruiseservices.com



No.	Vessel	ETA Day	Date	Time	Last Port	ETD Day	Date	Time	Next Port	Berth	Cruise Line	Port Agent	Туре	Length	Passengers
	Ruby Princess	Sun	Jul-16-2023	7:00 AM	20011-011	Sun	Jul-16-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	3,080
	Carnival Miracle	Mon	Jul-17-2023	7:00 AM		Mon	Jul-17-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,124
	Carnival Miracle	Thu	Jul-20-2023	7:00 AM		Thu	Jul-20-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,124
	Carnival Miracle	Mon	Jul-24-2023	7:00 AM		Mon	Jul-24-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,124
	Ruby Princess	Wed	Jul-24-2023	7:00 AM		Wed	Jul-24-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	903 951'	3,080
	Carnival Miracle	Thu	Jul-20-2023	7:00 AM		Thu	Jul-20-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,124
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	Carnival Miracle	Mon	Jul-31-2023	7:00 AM		Mon	Jul-31-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,124
	Carnival Miracle	Thu	Aug-03-2023	7:00 AM		Thu	Aug-03-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,124
	Ruby Princess	Sat	Aug-05-2023	7:00 AM		Sat	Aug-05-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	3,080
	Carnival Miracle	Mon	Aug-07-2023	7:00 AM		Mon	Aug-07-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,124
	Carnival Miracle	Thu	Aug-10-2023	7:00 AM		Thu	Aug-10-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,124
75	Ruby Princess	Tue	Aug-15-2023	7:00 AM		Tue	Aug-15-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	3,080
76	Carnival Miracle	Thu	Aug-17-2023	7:00 AM		Thu	Aug-17-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,124
77	Carnival Miracle	Sun	Aug-20-2023	7:00 AM		Sun	Aug-20-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,124
78	Carnival Miracle	Mon	Aug-21-2023	7:00 AM		Mon	Aug-21-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,124
79	Ruby Princess	Fri	Aug-25-2023	7:00 AM		Fri	Aug-25-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	3,080
80	Carnival Miracle	Thu	Aug-31-2023	7:00 AM		Thu	Aug-31-2023	4:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,124
81	Viking Star	Sat	Sep-02-2023	8:00 AM		Sat	Sep-02-2023	11:00 PM		Pier 27	Viking	SMS	Transit	748'	930
82	Ruby Princess	Mon	Sep-04-2023	7:00 AM		Mon	Sep-04-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	3,080
	Carnival Miracle	Mon	Sep-04-2023	7:00 AM		Mon	Sep-04-2023	4:00 PM		Pier 35S	Carnival	Metro	Full Turn	963'	2,124
	Carnival Miracle	Tue	Sep-05-2023	11:00 AM		Tue	Sep-05-2023	10:00 PM		Pier 27	Carnival	Metro	Full Turn	963'	2,124
	Viking Star	Sun	Sep-10-2023	7:00 AM		Sun	Sep-10-2023	6:00 PM		Pier 27	Viking	SMS	Transit	748'	930
	Ruby Princess	Thu	Sep-14-2023	7:00 AM		Thu	Sep-14-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	3,080
	Carnival Miracle	Thu	Sep-14-2023	7:00 AM		Thu	Sep-14-2023	4:00 PM		Pier 35S	Carnival	Metro	Full Turn	963'	2,124
		Mon	Sep-14-2023	8:00 AM		Mon	Sep-14-2023	11:00 PM		Pier 27	Viking	SMS		748'	930
	Viking Star										, , , , , , , , , , , , , , , , , , ,		Transit		
	Oceania Regatta	Sat	Sep-23-2023	8:00 AM		Sun	Sep-24-2023	9:00 PM		Pier 35N	Oceania	SMS	Transit	595'	684
	Ruby Princess	Sun	Sep-24-2023	7:00 AM		Sun	Sep-24-2023	4:00 PM	•• ·	Pier 27	Princess	Metro	Full Turn	951'	3,080
	Scenic Eclipse 2	Sun	Sep-24-2023	8:00 AM	Eureka	Sun	Sep-24-2023	10:00 PM	Monterey	Pier 35S	Scenic	Intercruises	Transit	551'	228
	Grand Princess	Tue	Sep-26-2023	7:00 AM		Tue	Sep-26-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	2,600
93	Crown Princess	Tue	Sep-26-2023	7:00 AM		Tue	Sep-26-2023	11:00 PM		Pier 35S	Princess	Metro	Transit	952'	3,080
94	Discovery Princess	Thu	Sep-28-2023	7:00 AM		Thu	Sep-28-2023	10:00 PM		Pier 27	Princess	Metro	Transit	1083'	3,660
95	Celebrity Eclipse	Fri	Sep-29-2023	8:00 AM		Fri	Sep-29-2023	6:00 PM		Pier 27	Celebrity	Intercruises	Transit	1,041'	2,852
	SF FLEET WEEK	Fri	Sep-29-2023			Tue	Oct-10-2023			Pier 30-32					
96	Carnival Miracle	Sat	Sep-30-2023	7:00 AM		Sat	Sep-30-2023	11:00 PM		Pier 27	Carnival	Metro	Disembark	963'	2,124
97	Volendam	Sat	Sep-30-2023	8:00 AM		Sat	Sep-30-2023	5:00 PM		Pier 35S	Holland America	Metro	Transit	781	1,432
98	Oceania Regatta	Sun	Oct-01-2023	8:00 AM		Mon	Oct-02-2023	9:00 PM		Pier 35S	Oceania	SMS	Transit	595'	684
	SF FLEET WEEK	Tue	Oct-03-2023			Tue	Oct-10-2023			Pier 35S					
99	Celebrity Eclipse	Tue	Oct-03-2023	8:00 AM		Tue	Oct-03-2023	12:00 AM		Pier 27	Celebrity	Intercruises	Transit	1,041'	2,852
100	Discovery Princess	Wed	Oct-04-2023	7:00 AM		Wed	Oct-04-2023	10:00 PM		Pier 27	Princess	Metro	Transit	1083'	3,660
101	Sapphire Princess	Thu	Oct-05-2023	7:00 AM		Thu	Oct-05-2023	10:00 PM		Pier 27	Princess	Metro	Transit	951'	2,670
	Majestic Princess	Fri	Oct-06-2023	7:00 AM		Fri	Oct-06-2023	11:00 PM		Pier 27	Princess	Metro	Transit	1083'	3,560
	Discovery Princess	Mon	Oct-09-2023	7:00 AM		Mon	Oct-09-2023	10:00 PM		Pier 27	Princess	Metro	Transit	1083'	3,660
	Celebrity Eclipse	Wed	Oct-11-2023	10:00 AM		Wed	Oct-11-2023	12:00 AM		Pier 27	Celebrity	Intercruises	Transit	1,041'	2,852
	Sapphire Princess	Thu	Oct-12-2023	7:00 AM		Thu	Oct-12-2023	10:00 PM		Pier 27	Princess	Metro	Transit	951'	2,670
	Celebrity Eclipse	Wed	Oct-12-2023	10:00 AM		Wed	Oct-12-2023	12:00 AM		Pier 27	Celebrity	Intercruises	Transit	1,041'	2,870
	Seabourn Odyssey	Wed	Oct-18-2023	8:00 AM		Thu	Oct-10-2023	12:00 AM 12:00 PM		Pier 35S	Seabourn	Metro	Transit	650'	462
	Ruby Princess	Sun	Oct-22-2023	7:00 AM		Sun	Oct-22-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	3,080
	Discovery Princess	Mon	Oct-23-2023	7:00 AM		Mon	Oct-23-2023	10:00 PM		Pier 27	Princess	Metro	Transit	1083'	3,660
	Celebrity Eclipse	Tue	Oct-24-2023	10:00 AM		Tue	Oct-24-2023	12:00 AM		Pier 27	Celebrity	Intercruises	Transit	1,041'	2,852
	Norwegian Joy	Wed	Oct-25-2023	8:00 AM		Wed	Oct-25-2023	11:00 PM		Pier 27	Norwegian	SMS	Transit	1094'	3,804
112	Ruby Princess	Sun	Oct-29-2023	7:00 AM		Sun	Oct-29-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	3,080
	Norwegian Encore	Tue	Oct-31-2023	12:00 PM		Tue	Oct-31-2023	10:00 PM		Pier 27	Norwegian	SMS	Transit	1094'	3,998
113		Sun	Nov-05-2023	7:00 AM		Sun	Nov-05-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	3,080
113	Ruby Princess	1	Nov-06-2023	7:00 AM		Mon	Nov-06-2023	10:00 PM		Pier 27	Princess	Metro	Transit	1083'	3,660
113 114	Ruby Princess Discovery Princess	Mon				Thu	Nov-21-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	3,080
113 114 115		Mon Thu	Nov-21-2023	7:00 AM						1	1	1	1		3,080
113 114 115 116	Discovery Princess	1		7:00 AM 7:00 AM		Sun	Nov-26-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	3,060
113 114 115 116 117	Discovery Princess Ruby Princess	Thu	Nov-21-2023				Nov-26-2023 Dec-12-2023	4:00 PM 4:00 PM		Pier 27 Pier 27	Princess Princess	Metro Metro	Full Turn Full Turn	951' 951'	3,080
113 114 115 116 117 118	Discovery Princess Ruby Princess Ruby Princess	Thu Sun	Nov-21-2023 Nov-26-2023	7:00 AM		Sun									,
113 114 115 116 117 118	Discovery Princess Ruby Princess Ruby Princess Ruby Princess	Thu Sun Thu	Nov-21-2023 Nov-26-2023 Dec-12-2023	7:00 AM 7:00 AM		Sun Thu	Dec-12-2023	4:00 PM		Pier 27	Princess	Metro	Full Turn	951'	3,080
113 114 115 116 117 118 119	Discovery Princess Ruby Princess Ruby Princess Ruby Princess Ruby Princess	Thu Sun Thu Fri	Nov-21-2023 Nov-26-2023 Dec-12-2023 Dec-22-2023	7:00 AM 7:00 AM 7:00 AM		Sun Thu	Dec-12-2023 Dec-22-2023	4:00 PM 4:00 PM		Pier 27 Pier 27	Princess Princess	Metro	Full Turn	951'	3,080
113 114 115 116 117 118 119	Discovery Princess Ruby Princess Ruby Princess Ruby Princess	Thu Sun Thu Fri	Nov-21-2023 Nov-26-2023 Dec-12-2023	7:00 AM 7:00 AM 7:00 AM		Sun Thu	Dec-12-2023	4:00 PM 4:00 PM		Pier 27	Princess Princess	Metro	Full Turn	951'	3,080

Port of San Francisco Pier 1, The Embarcadero San Francisco, CA 94111 (415) 274-0400 www.sfport.com

Port of San Francisco 2023 Cruise Ship Schedule

(Updated Jul-22-2022)



Metro Cruise Services Pier 27, The Embarcadero San Francisco, CA 94111 (415) 231-1491 www.metrocruiseservices.com

Exhibit C

DREDGING HISTORY 2016 2017 2018 Dredge Mtzma Mtzma Depth MWP MWP MWP Non-Non-(- ft Cover Cover Cover Cover Cover upland SFDODS SF-11 MLLW) SFDODS SF-11 Mat'l Mat'l upland SFDODS SF-11 Mat'l Mat'l Mat'l Ma Facility FWWAP Varies Hyde Street Harbor -14 Pier 35 West Pier 35 East Pier 27 -30 54,065 39,915 20,203 14,310 -35 -35 47,472 40,770 24,805 20,666 Central Basin -32/-35 Pier 80A -40 -40 Pier 80B 14,397 -40 -35 -40 Pier 80C 13,299 Pier 80D Islais Creek Inner Channel Pier 92 -35 Islais Creek Outer Channel -40 61,125 Islais Creek Approach -40 25,804 Pier 94 Pier 96 -40 -40 Total Volume 88,242 0 0 54,065 0 24,805 39,915 114,625 0 0 20,203 34,976 0 29

179,345

142,307

Total Volume per Year

				2019					2020					5 year total		
Mtzma Non- Cover Mat'l	upland	SFDODS	SF-11	MWP Cover Mat'l	Mtzma Non- Cover Mat'l	upland	SFDODS	SF-11	MWP Cover Mat'l	Mtzma Non- Cover Mat'l	upland	SFDODS	SF-11	MWP Cover Mat'l	Mtzma Non- Cover Mat'l	upland
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29,526	0	37,603	0	21,927	0	0	0	0	14,488	0	0	170,853	74,891	151,040	83,591	0
				59,530					14,488					480,375		

84,705



DEPARTMENT OF THE ARMY

SAN FRANCISCO DISTRICT, CORPS OF ENGINEERS 1455 MARKET STREET SAN FRANCISCO, CALIFORNIA 94103-1398

Regulatory Division

AUG .0 1 2014

Subject: File No. 2013 – 00333S; Port of San Francisco Maintenance Dredging Project; Final Transmittal of Corps Permit

Ms. Monique Moyer Port of San Francisco Pier 1 San Francisco, California 94111

Dear Ms. Moyer:

Enclosed is your signed copy of a Department of the Army permit (Enclosure 1) for the maintenance dredging of the berths and approach areas at the Port of San Francisco located in the city and county of San Francisco, California. The enclosed copy of the Department of the Army Permit will authorize the removal of an estimated 4.5 million cubic yards of sediment, over a 10-year period, from the Port of San Francisco's berths and approach areas.

Please complete the appropriate parts of the "Project Status" form (Enclosure 2) for each episode, and return them to this office. You are responsible for ensuring that the contractor (or workers) executing the activity authorized herein is knowledgeable with the terms and conditions of this authorization.

Be advised that your signed permit will NOT be an authorization to proceed. You must first fulfill the requirements of Special Permit Conditions 8a, 8b, 8c and 8d on pages 4B and 4C. The conditions are for the submittal, to this office for approval, of a dredge operations plan, a before-dredge survey and a solid-debris management plan. Once these items have been submitted and approved, by this office, you will receive written authorization to commence your work. It is important that all the information requested in the above-mentioned Special Conditions is submitted as specified or the submittal might be considered incomplete. An incomplete submittal can be returned for completion, causing delays to your project. You are also responsible for all other general and special conditions contained in your permit. If you have any questions please call Mr. Mark D'Avignon of our staff at (415) 503-6806 or e-mail to mark.r.d'avignon@usace.army.mil. If you wish to write, please address all correspondence to Mr. Mark D'Avignon at the above letterhead address and refer to the file number at the head of this letter.

Sincerely,

ganern. Helis

John C. Morrow Lieutenant Colonel, U.S. Army Commander and District Engineer

Enclosures

Copies Furnished (w/encl 1 only):

US F&WS, Sacramento, CA Attn: Ryan Olah US EPA, San Francisco, CA Attn: Melissa Scianni US NMFS, Santa Rosa, CA Attn: Gary Stern BCDC, San Francisco, CA Attn: Brenda Goeden CA F&W, Monterey, CA Attn: Eric Wilkins CA RWQCB, Oakland, CA Attn: Beth Christian CA SLC, Sacramento, CA Attn: Donn Oetzel

DEPARTMENT OF THE ARMY PERMIT

PERMITTEE: Port of San Francisco

PERMIT NO.: 2013-00333S

ISSUING OFFICE: San Francisco District, U.S. Army Corps of Engineers (USACE)

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate District or Division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below:

PROJECT DESCRIPTION:

The permittee is authorized to remove approximately 4.5 million cubic yards (cy) of sediment from the Port of San Francisco, over the life of the permit, from 361 acres (approximately) within the berths and approaches areas at the Port of San Francisco located along the San Francisco Waterfront from Piers 94/96 at the southern end to Pier 45 at the northern end in the city of San Francisco, San Francisco County, California. The permitted project design depths are -12 to -42 feet mean lower low water (MLLW) plus an additional 2-foot overdepth allowance. Maintenance dredging would be carried out at the following designated dredging locations: Berths 9S and N, Pier 15/17 Face, Berths 27, 29, 30/32, 31/33, 35 E and W, 38N, 39E and W, 40, 41 1/2, 43, 45, 48, 50N and S, Pier 50 Face, Pier 52 Basin, Berths 54 N and S, Berths 80, 90, 91, 94/96, Inner and Outer Fisherman's Wharf, Downtown Ferry Terminal, China Basin, South Beach Yacht Harbor, Central Basin, and Islais Creek. Refer to Table 1 for the project design depths by dredge area (Attachment 1). The dredged material would be removed using a mechanical dredge, hopper dredge, or other appropriate dredging equipment. In addition to standard dredging, the Port is also authorized to implement knockdowns involving mechanical movement of approximately 2,000 cubic yards of sediment on an annual basis when areas within a berth become navigation obstructions and dredging of the complete berthing area is unwarranted. The dredged material would be transported to an appropriate disposal site by dredged material scows pushed or towed by tug boats, or by hopper dredge. The permittee is hereby authorized to place suitable dredged material at the Alcatraz Island Dredged Material Disposal Site (SF-11), the San Pablo Bay Dredge Material Disposal Site (SF-10) the San Francisco Deep Ocean Disposal Site (SF-DODS), a permitted beneficial reuse site, or at an appropriate upland disposal location outside Corps jurisdiction.

All work shall be conducted in accordance with the attached drawings entitled, "Applicant: Port of San Francisco, Project: Port of San Francisco Maintenance Dredging, Location: City and County of San Francisco, Corps File No.: 2013-00333S, Date: March 14, 2014," in twenty (20) sheets dated March 14, 2014 (Attachment 2).

Prior to each dredging episode, the Dredge Material Management Office (DMMO) will evaluate the sediments to be dredged for disposal or reuse suitability. The DMMO includes representatives from the U.S. Environmental Protection Agency, San Francisco Bay Conservation and Development Commission (BCDC), San Francisco Bay Regional Water Quality Control Board (RWQCB), and the U.S. Army Corps of Engineers (USACE). The DMMO is tasked with approving sampling and analysis plans in conformity with testing manuals, reviewing the test results and reaching consensus regarding a suitable disposition for the material.

PROJECT LOCATION: Port of San Francisco, San Francisco Waterfront from Piers 94/96 to Pier 45, City and County of San Francisco, California.

GENERAL CONDITIONS:

1. The time limit for completing the work authorized ends on **December 31, 2024**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as Special Conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions. (Conditional Water Quality Certification for Maintenance Dredging at the Port of San Francisco, issued by the Regional Water Quality Control Board, San Francisco Bay Region, under CIWQS Place No. 735444 (EAC) on July 29, 2014 (Attachment 3).)

6. If a conditioned coastal zone consistency concurrence or determination has been issued for your project, you must comply with the conditions specified in the concurrence or determination as Special Conditions to this permit. For your convenience, a copy of the concurrence or determination is attached if it contains such conditions. (Conditioned Coastal Zone Consistency Determination for the Port of San Francisco Maintenance Dredging Project issued by the S.F. Bay Conservation and Development Commission (BCDC), Permit No. M2002.071.03, issued September 19, 2003 amended through August 22, 2011, Amendment No. 3 (Attachment 4).)

7. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the Terms and Conditions of your permit.

8. You understand and agree that, if future operations by the United States require the removal, relocation or other alteration of the structure or work authorized herein, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, you will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration (Section 10 only).

SPECIAL CONDITIONS:

1. All dredging operations shall be limited to June 1 through November 30 each year for the following reasons:

a. In order to minimize impacts to federally listed threatened steelhead trout (*Oncorhynchus mykiss*), dredging and disposal operations shall occur from June 1 through November 30. Changes to this environmental work window would require consultation (pursuant to Section 7 of the Endangered Species Act) with, and approval from, the National Marine Fisheries Service and the Corps of Engineers.

- b. In order to minimize impacts to federally listed endangered and threatened chinook salmon (*Oncorhynchus tschwytscha*), dredging and disposal operations shall occur from June 1 through November 30. Changes to this environmental work window would require consultation (pursuant to Section 7 of the Endangered Species Act) with, and approval from, the National Marine Fisheries Service and the Corps of Engineers.
- c. All dredging operations will occur outside of the sensitive Pacific herring spawning season, December 1 through March 1, or as determined by the California Department of Fish and Wildlife.

2. Knockdowns episodes may not be conducted without DMMO approval. Displaced material shall remain in the permitted dredge footprint for that berth. The permittee shall submit a knockdown request to Corps prior to each individual knockdown event. The knockdown request shall include a copy of a recent bathymetric survey, site history, equipment description and an explanation for work request. Pre- and post-grading (knockdown) bathymetric surveys will be provided to the Corps.

3. Additional special conditions for dredging projects are found on pages 4A-4D of this permit, and shall be adhered to at all times.

FURTHER INFORMATION:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 403). Section 10 of the Rivers and Harbors Act generally regulates all structures and work occurring below the plane of mean high water in tidal waters of the United States; in former diked baylands currently below mean high water; outside the limits of mean high water but affecting the navigable capacity of tidal waters; or below the plane of ordinary high water in non-tidal waters designated as navigable waters of the United States. Navigable waters of the United States generally include all waters subject to the ebb and flow of the tide; and/or all waters presently used, or have been used in the past, or may be susceptible for future use to transport interstate or foreign commerce. The term "structure" includes, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island or reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, or any other obstacle or obstruction. The term "structure" does **not** include bridges and causeways constructed in or over navigable or tidal waters of the United States, since this regulatory responsibility has been delegated to the U.S. Coast Guard under the Department of Transportation Act of 1966 (Pub. L. No. 89-670). The term "work" includes, without limitation, any dredging or disposal of dredged material, filling, or other modification of a navigable water of the United States.

(X) Section 404 of the Clean Water Act (33 U.S.C. § 1344). Section 404 of the Clean Water Act generally regulates all discharges of dredged or fill material occurring below the plane of ordinary high water in non-tidal waters of the United States; or below the high tide line in tidal waters of the United States; and within the lateral extent of wetlands adjacent to these waters. Waters of the United States generally include the territorial seas; all traditional navigable waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters subject to the ebb and flow of the tide; wetlands adjacent to traditional navigable waters; non-navigable tributaries of traditional navigable waters that are relatively permanent, where the tributaries typically flow year-round or have continuous flow at least seasonally; and wetlands directly abutting such tributaries. Where a case-specific analysis determines the existence of a "significant nexus" effect with a traditional navigable water, waters of the United States may also include non-navigable tributaries that are not relatively permanent; wetlands adjacent to non-navigable tributaries that are not relatively permanent; and wetlands adjacent to but not directly abutting a relatively permanent non-navigable tributary. The term "dredged material" means material that is excavated or dredged from waters of the United States. The term "fill material" means material placed in waters of the United States where the material has the effect of replacing any portion of a water of the United States with dry land or of changing the bottom elevation of any portion of a water of the United States. Examples of such fill material include, but are not limited to, rock, sand, soil, clay, plastics, construction debris, and materials used to create any structure or infrastructure in waters of the United States. The term "fill material" does not include trash or garbage.

(X) Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. § 1413). Section 103 of the Marine Protection, Research, and Sanctuaries Act generally regulates the transport of dredged material for the purpose of disposal in ocean waters. Ocean waters is defined as those waters of the open seas lying seaward of the base line from which the territorial seas is measured, as defined in the Convention of the Territorial Sea and the Contiguous Zone (15 UST 1606; TIAS 5639).

- 2. Limits of this authorization:
 - a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability: In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.
- e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision: This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate. (See Item 4 above.)

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 C.F.R. Section 325.7 or enforcement procedures such as those contained in 33 C.F.R. Sections 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the Terms and Conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 C.F.R. Section 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

SPECIAL CONDITIONS TO PERMIT NUMBER 2013-00333S

1. Your use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.

2. You must have a copy of this permit available on the vessel used for the authorized transportation and disposal of dredged material.

3. You must advise this office as per Special Condition 12, on page 4D, **before** you start dredging activities under the authorization of this permit.

4. To provide notification of activities affecting navigation, the permittee shall provide the following information by fax, e-mail or standard mail to the contact listed below **at least two weeks before commencing work**:

- a. Name and telephone number of the dredge and or project manager.
- b. Size and placement of any floating construction equipment.
- c. Radio telephone frequencies and call signs of any marine equipment.
- d. Anticipated work start and completion dates.

Commander (dpw) 11th Coast Guard District Coast Guard Island, Bldg 50-3 Alameda, California 94501-5100

POC: Local Notice to Mariners Waterways Management Branch PH: 510-437-2980 FAX: 510-437-5836 E-MAIL: D11LNM@uscg.mil

5. The Coast Guard Captain of the Port of San Francisco Bay may require modifications to marine construction equipment deployment or mooring systems to safeguard navigation while work is in progress.

6. All vessels operated for disposal of dredged material are required to participate in the Coast Guard's Vessel Traffic Control Service (VTS). Five minutes before each departure, the permittee shall notify the VTS by radio, via Channel 14, of the following: The name of vessel; time of departure from dredge site; and time of departure from disposal site.

7. When utilizing the Alcatraz Disposal Site (SF-11), the permittee shall dispose of all dredged material within a circular area of radius 1000 feet with center located at latitude 37°49'17"N; longitude 122°25'23"W. The specific location within the disposal area will be determined by the District Engineer upon approval of the Dredge Operation Plan (see below).

When utilizing the San Pablo Bay Disposal Site (SF-10), the permittee shall dispose of all dredged material within a rectangular area, 1500 feet by 3000 feet, long axis bearing 050 true, and center at latitude 38°00'28"N; longitude 122°24'55"W

When utilizing the San Francisco Deep Ocean Disposal Site (SF-DODS) the permittee must adhere to *EPA Standard* Ocean Disposal Conditions for the San Francisco Deep Ocean Disposal Site dated April 9, 2013 (Attachment 5) or subsequent updates of these conditions.

Placement of dredged material at the Montezuma Wetlands Restoration Project will be overseen by the operator in compliance with Corps permit 19405E.

8. The permittee shall submit the following reports for review and comment to:

U.S. Army Corps of Engineers, San Francisco District Operations and Readiness Division Attn: Mark D'Avignon 1455 Market Street, 16th Floor San Francisco, California 94103-1398

Dredge Material Analysis: Submit, for approval, no earlier than 60 days prior to the proposed a. commencement of any authorized successive dredging episodes, dredge material analysis (Physical, Chemical, and Biological) sampling and testing information. Please include the U.S. Army Corps of Engineers (Corps) permit number and dredge episode number with this submittal. Also submit Regional Water Quality Control Board (RWQCB) water quality certification or waiver for disposal of the material. For each dredging episode, the permittee shall obtain the approval of the District Engineer for formulating specific sediment testing procedures for the Dredged Material Analysis. The testing protocol will be in accordance with the testing guidelines as published in the Corps and U.S. Environmental Protection Agency publication entitled, "Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. - Testing Manual" (The Inland Testing Manual or ITM, EPA-823-B-98-004), dated February 1998, and subsequent amendments thereto. The permittee shall provide a copy of the Dredged Material Analysis to the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Game concurrent with the San Francisco Bay Conservation and Development Commission's RWQCB's, and the Corps' receipt of this information. Agency comments submitted to the Corps within 15 calendar days thereafter will be given full consideration in the decision on dredged material disposal.

b. <u>Dredge Operation Plan</u>: Submit, for approval by this office, no earlier than 60 calendar days and no later than 20 calendar days before the proposed commencement of dredging, a plan which includes the following: **Corps permit number, dredge episode number**, a copy of the dredging contract or description of the work under which the contractor will do the permitted work; name and telephone numbers of the dredging contractor's representative on site; dredging start and completion dates; names of vessel; dump scow numbers or identification; bin or barge capacities; identification of work as either maintenance dredging or new dredging; discussion of proposed dredging procedures, as governed under Special Condition No. 11, with detailed drawings or specifications of the grid or centrifugal pump system; quantity of material to be removed; dredging design depth and typical cross section including overdepth; and date of last dredging episode and design depth. The Dredge Operational Plan shall also provide the following information:

1. The controls being established to insure that dredging operations occur within the limits defined by the channel dimensions and typical channel section. The horizontal and vertical positioning systems being utilized must be indicated as noted in 3, below.

2. The controls being established to insure that disposal of the dredged material at the disposal site is at the assigned location and depth. The horizontal and vertical positioning systems being utilized must be indicated as noted in 3, below.

3. Method of determining electronic positioning of dredge or dump scow during entire dredging operation at dredge site, disposal site and en route to and from disposal site.

Please note that failure to provide all of the above information may result in delays to your project. When your Dredge Operation Plan has been approved, you will receive a written authorization to commence with your project.

c. <u>Pre-Dredge Survey</u>: Submit no earlier than 60 calendar days and no later than 20 calendar days before commencement of dredging, a survey with accuracy to one-tenth foot that delineates and labels the following: areas to be dredged with overdepth allowances; existing depths; estimated quantities to be dredged to the design depth; and estimated quantities to the overdepth limit. All surveys shall be signed by the permittee to certify their accuracy. Please include the Corps permit number and dredge episode number.

Please note that failure to provide all the above information may result in delays to your project.

d. <u>Solid Debris Management Plan</u>: Submit no earlier than 60 calendar days and no later than 20 calendar days before commencement of work, a plan which describes measures to ensure that solid debris generated during any authorized dredging, demolition or construction operation is retained and properly disposed in areas not under Corps jurisdiction. At a minimum, the plan shall include the following: source and expected type of debris; debris retrieval method; Corps permit number and dredge episode number; disposal method and site; schedule of disposal operations; and debris containment method to be used, if floatable debris is involved.

Please note that failure to provide all the above information may result in delays to your project.

e. <u>Post-Dredge Survey</u>: Submit, within 30 days of the last disposal activity ("last" is defined as that activity after which no further activity occurs for 15 calendar days), a survey with accuracy to one-tenth foot that delineates and labels the areas dredged and the dredged depths. Also, include the Corps permit number, dredge episode number, dates of dredging commencement and completion, actual quantities dredged to the design depth, and actual quantities to the overdepth limit. The permittee shall substantiate the total quantity dredged by including calculations used to determine the volume difference (in cubic yards) between the Pre- and Post-Dredging Geeper than is permitted (design plus overdepth allowance). All surveys shall be accomplished by a licensed surveyor and signed by the permittee to certify their accuracy. A copy of the Post-Dredge Survey should be sent to the National Ocean Service for chart updating:

NOAA/National Ocean Service Nautical Data Branch N/CS26, SSMC3, Room 7230 1315 East-West Highway Silver Spring, Maryland 20910-3282.

9. <u>Disposal Site Verification Log (DSVL)</u>: Submit on a weekly basis by noon Monday, the log (downloadable from <u>http://www.spn.usace.army.mil/Portals/68/docs/Dredging/guidance/document2010-09-07-132110.pdf</u>) that enumerates work accomplished during the preceding week. Mail to:

U.S. Army Corps of Engineers, San Francisco District Attn: Shelah Sweatt, DMMO 1455 Market Street. 16th Floor San Francisco, California 94103-1398;

FAXed to Ms. Shelah Sweatt at (415) 503-6690; or e-mail to shelah.sweatt@usace.army.mil. Please include the Corps permit number and dredge episode number. The log will be provided when the Corps approves the Dredge Operation Plan and authorizes the commencement of the dredging.

10. <u>Overflow requirements</u>:

a. No overflow or decant water shall be discharged from the barge, with the exception of spillage incidental to mechanical dredge operations.

b. During transportation from the dredging site to the disposal site, no material shall be permitted to overflow, leak or spill from barge, bins or dump scows.

c. For hopper dredge only, during dredging operations, overflow shall be limited to a maximum of 15 minutes. Adjustments to the dredging operation may be required to insure that once overflow commences, it will not exceed the 15-minute limit.

d. For approved sand dredging, overflow will not exceed 15 minutes or the economic load, whichever occurs first.

11. The permittee shall ensure that all dredged material is slurried prior to disposal to prevent any accumulation or build up of material at the disposal site. All dredged material shall be slurried in <u>one</u> of the following manners:

a. Dredged material will be either pumped with a centrifugal pump prior to leaving the dredge site for the disposal site; or,

b. If the material is mechanically dredged, passed through a debris grid, with a maximum opening size of 12 inches by 12 inches that will cover the entire loading area of the dump scow. Everything that does not pass through the grid will be considered solid debris and shall be disposed in areas outside of Corps jurisdiction. All such material shall be promptly removed from the grid at the end of each 8 hour shift or sooner.

12. The permittee or dredge contractor shall inform this office when: 1) a dredge episode actually commences, 2) when dredging is suspended (suspension is when the dredge contractor leaves the dredge site for more than 48 hours for reasons other than equipment maintenance), 3) when dredging is restarted, and 4) when dredging is complete. Each notification should include the Corps permit number and dredge episode number. The information can be sent to the attention of Mark D'Avignon, in writing to the address below; FAXed to (415) 503-6690; e-mailed to mark.r.d'avignon@usace.army.mil or via telephone message at (415) 503-6806.

U.S. Army Corps of Engineers, San Francisco District Operations and Readiness Division Attn: Mark D'Avignon 1455 Market Street, 16th Floor San Francisco, California 94103-1398

13. The permittee, as directed by the District Engineer under authority pursuant to the policies and procedures of 33 CFR 325.7, may be required to modify disposal schedules and monthly disposal quantities for particular dredging episodes.

14. The permittee shall allow the dredging area and equipment to be inspected by the Corps staff upon request.

15. For each dredge episode, the permittee shall be responsible for obtaining a letter of water quality certification from the Regional Water Control Quality Board and authorization from the San Francisco Bay Conservation and Development Commission (BCDC). Water quality certification and BCDC authorization will be a prerequisite to the District Engineer's decision to approve or disapprove specific dredge episodes pursuant to the policies and 33 CFR 325.2(b)(1)(ii) and 325.2(b)(2)(ii).

16. If a land, ocean, or other aquatic disposal site becomes available for use during the life of the permit, the permittee shall evaluate these disposal alternatives, taking into consideration cost, existing technology, and logistics in light of the overall project purpose to facilitate compliance with the 404(b)(1) Guidelines (40 CFR 230). This evaluation shall be submitted to the Corps at least 60 calendar days before commencement of subsequent dredging episodes. The District Engineer, upon review of this information and after consultation with other resource agencies, may direct the permittee to use such sites in lieu of or in addition to the Alcatraz Disposal Site (SF-11) or the San Pablo Bay Disposal Site (SF-10), under authority of 33 CFR 325.7 and 40 CFR 230.10(a).

6. Extensions: General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the Terms and Conditions of this permit.

culey

7/3//2014 (DATE)

(PERMITTEE) Monique Moyer Executive Director Port of San Francisco

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

gane m.

(DISTRICT ENGINEER) John C. Morrow Lieutenant Colonel, US Army District Engineer (DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE)

(DATE)

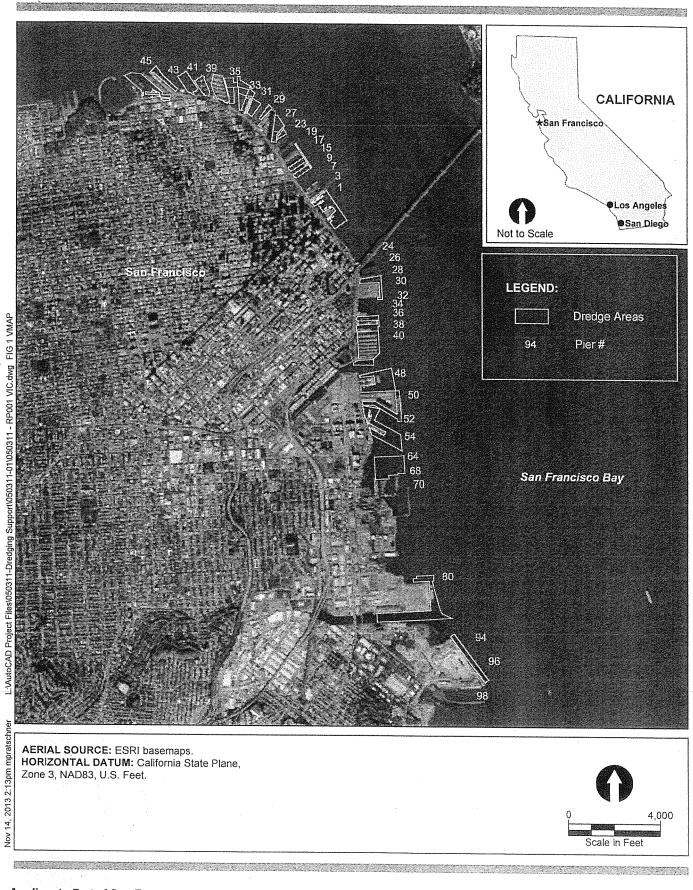
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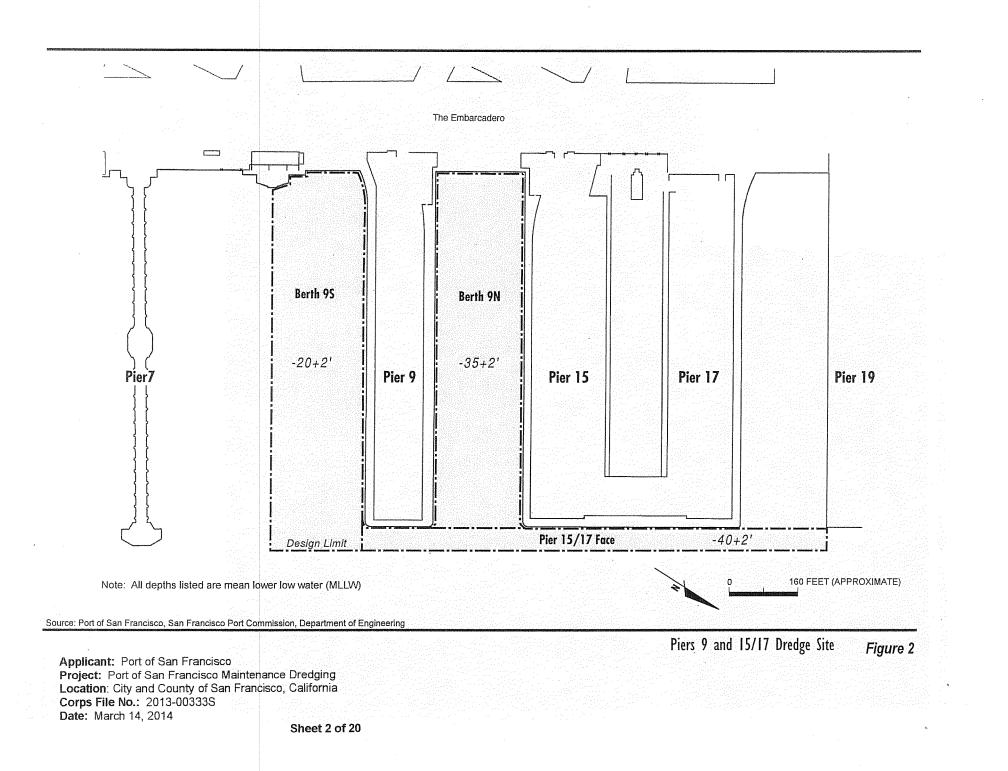
Table 1. Dredging Design Depths, Permitted Surface Areas, and Proposed Volumes (cubic yards) ofMaintenance Dredge Material over 10 Years for the Port of San Francisco Maintenance DredgingProject (Corps File No. 2013-00333S), dated May 19, 2014. (Note: OD means overdepth allowance)

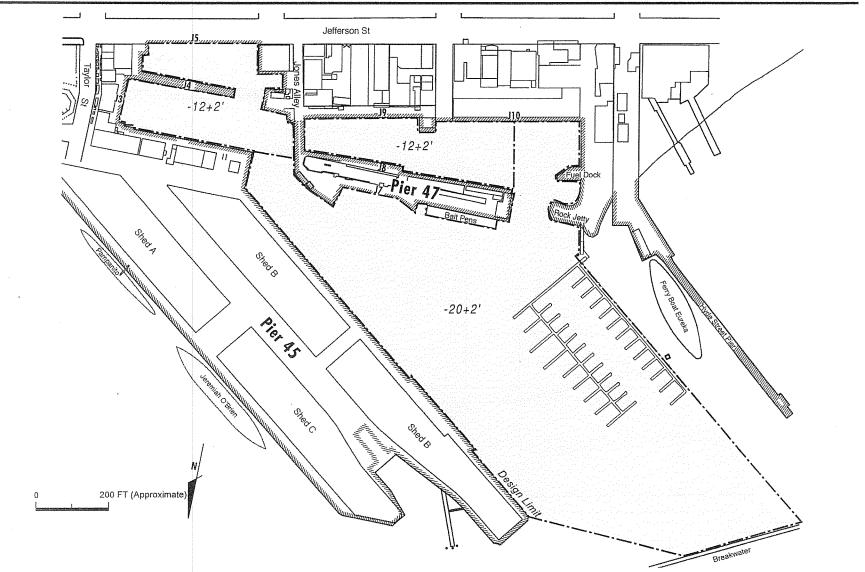
Location	Project Depth + OD (ft MLLW)	Surface Area of permitted boundary (acres)	Estimated Volume 2014 -2019	Estimated Volume 2019-2024	Permit Figure No.
Pier 9 South Berth	-20' + 2' OD	3.6	10,000	10,000	2
Pier 9 North Berth	-35' + 2' OD	3.5	10,000	10,000	2
Pier 15/17 Face	-40' + 2' OD	1.4	3,000	3,000	2
Inner Fisherman's Wharf	-12+ 2' OD	3.7	15,000	15,000	3
Outer Fisherman's Wharf	-20' + 2' OD	48.7	75,000	75,000	3
Pier 45 E/43 1/2 Berths	-35' + 2' OD	5.8	50,000	50,000	4
Per 43/41 Berths	-20' + 2' OD	9.2	20,000	20,000	5
Pier 39 (East and West Marina Basins)	-12'+ 2' OD	20.0	60,000	60,000	6
Pier 35 East Berth	-35' + 2' OD	11.6	400,000	400,000	7
Pier 35 West Berth	-35' + 2' OD	8.1	415,000	415,000	8
Pier 33/31 Berths	-35' + 2' OD	5.3	15,000	15,000	9
Pier 29 Berth	-35' + 2' OD	2.5	15,000	15,000	10
Pier 27 Berth	-35'+ 2' OD	9.6	385,000	325,000	11
Downtown Ferry Terminal Plaza, Pier 1/2 and 1E Berths	-20' + 2' OD	19.1	20,000	20,000	12
Pier 28 E to 30/32 Berths	-38' + 2' OD	6.8	50,000	50,000	13
Pier 48/50 N Berths & Approach	-35'+ 2' OD	23.4	30,000	30,000	14
Pier 50 South Face	-42'+ 2' OD	5.3	10,000	10,000	15
Pier 50 South Berth	-35'+ 2' OD	6.7	20,000	20,000	15

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Location	Project Depth + OD (ft MLLW)	Surface Area of permitted boundary (acres)	Estimated Volume 2014 -2019	Estimated Volume 2019-2024	Permit Figure No.
Pier 52 Basin	-20'+ 2' OD	8.4	12,000	12,000	16
Pier 54 N & S Berths and Approach	-35'+ 2' OD	17.7	15,000	15,000	16
Central Basin	-35'+ 2' OD	25.6	80,000	80,000	17
Pier 80/92/Islais Creek Cargo Complex					
Berth 80 A	-40'+ 2' OD	4.3	25,000	25,000	18
Berth 80 B	-40'+ 2' OD	2.7	25,000	25,000	18
Berth 80 C	-40'+ 2' OD	8.1	25,000	25,000	18
Berth 80 D	-40'+ 2' OD	4.8	25,000	25,000	18
Berth 90	-40'+ 2' OD	3.6	20,000	20,000	18
Berth 92	-40'+ 2' OD	2.2	20,000	20,000	18
Islais Creek Approach	-40'+ 2' OD	8.0	30,000	30,000	18
Islais Creek Inner & Outer Channels	-40'+ 2' OD	2.0	80,000	80,000	18
SubTotal Pier 80/92/Islais Creek Cargo Complex		35.7	250,000	250,000	
Piers 94/96 Berths	-40'+ 2' OD	40.0	125,000	125,000	18
China Basin	-20'+ 2' OD	4.2	15,000	15,000	19
South Beach Yacht Harbor	-20'+ 2' OD	23.6	80,000	80,000	20
Pier 36/38 N Berths	-35'+ 2' OD	4.2	25,000	25,000	20
Pier 38 S/40 Berths	-35'+ 2' OD	6.9	25,000	25,000	20
Totals		361	2,230,000	2,170,000	

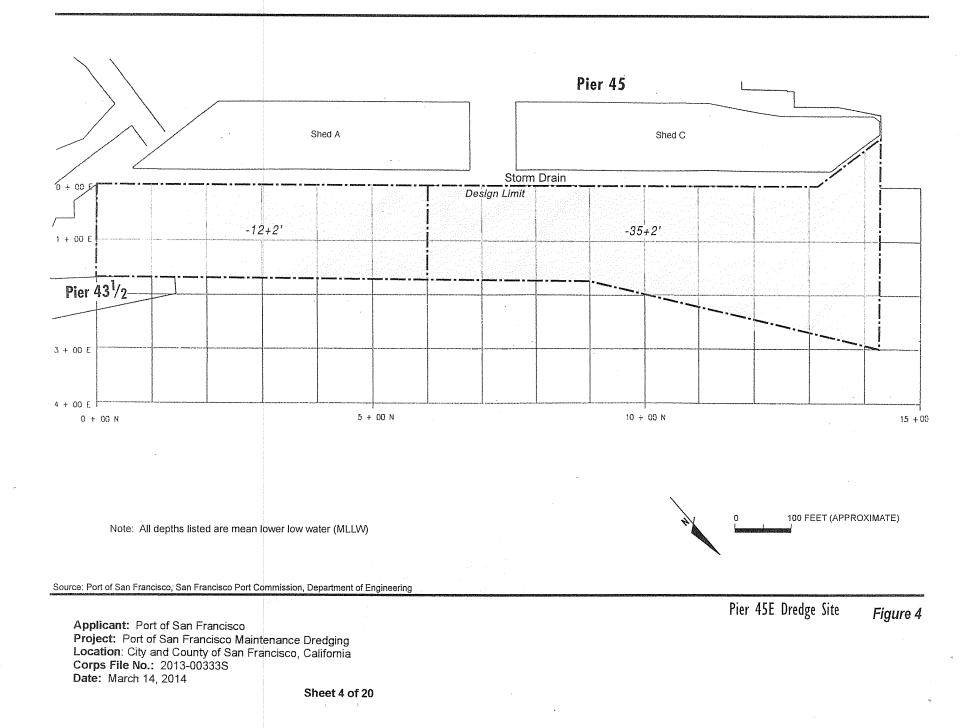


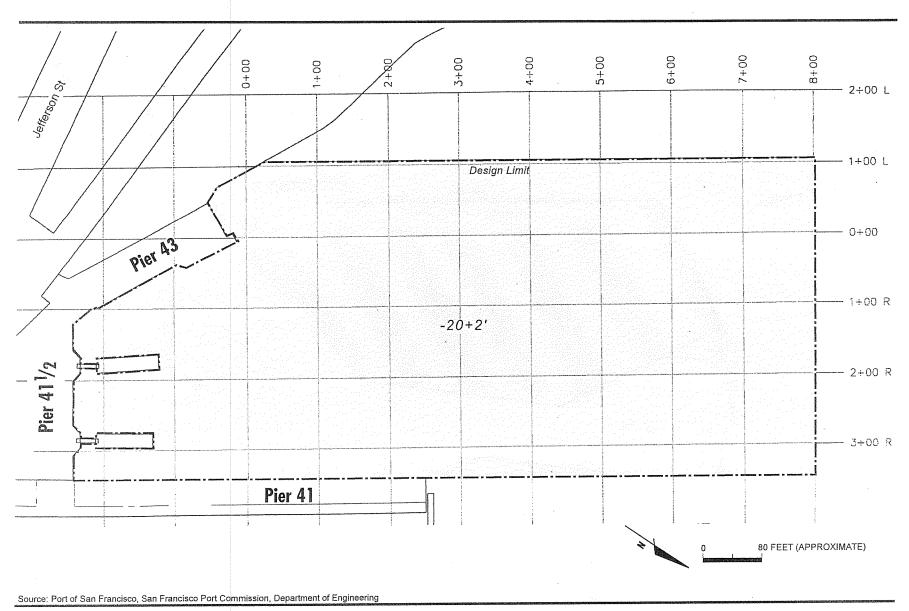




Source: Port of San Francisco, San Francisco Port Commission, Department of Engineering

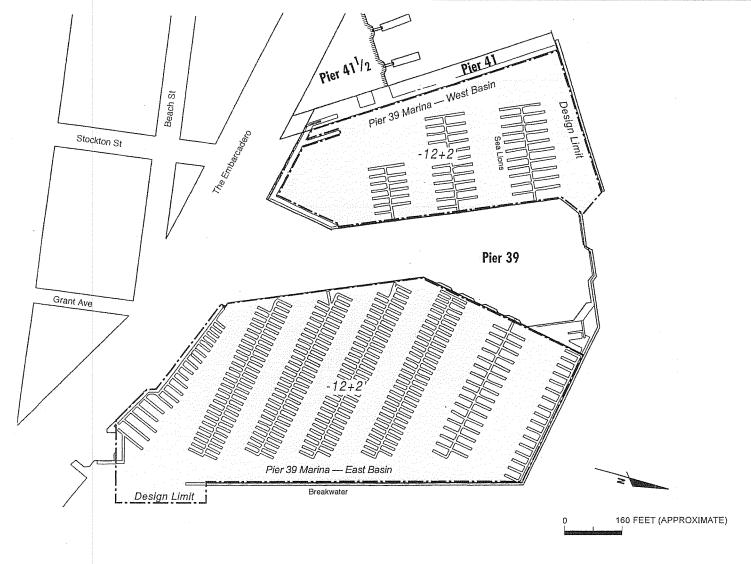
Applicant: Port of San Francisco Project: Port of San Francisco Maintenance Dredging Location: City and County of San Francisco, California Corps File No.: 2013-00333S Date: March 14, 2014 Fisherman's Wharf Piers 45 and 47 Dredge Site Figure 3





Pier 43 Dredge Site Figure 5

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Source: Port of San Francisco, San Francisco Port Commission, Department of Engineering

Pier 39 Dredge Sites Figure 6

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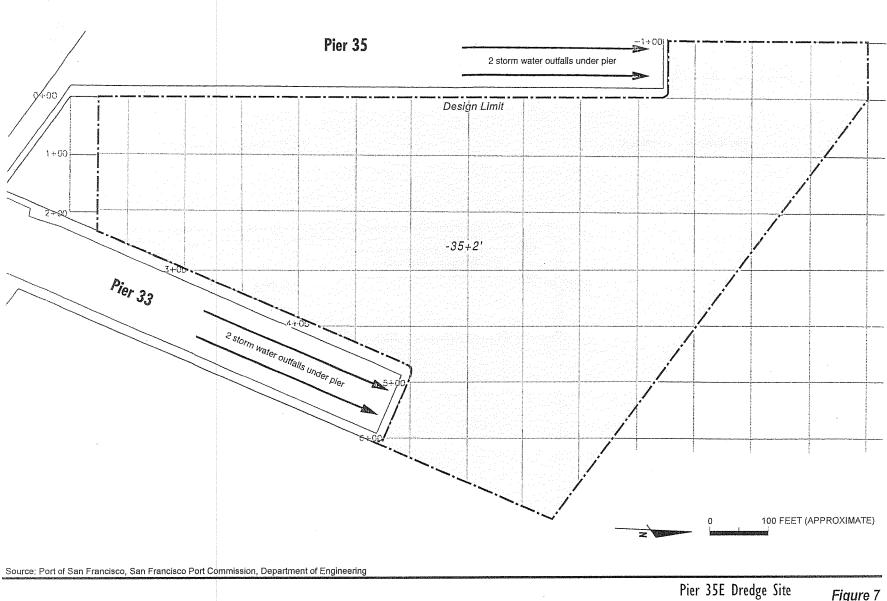
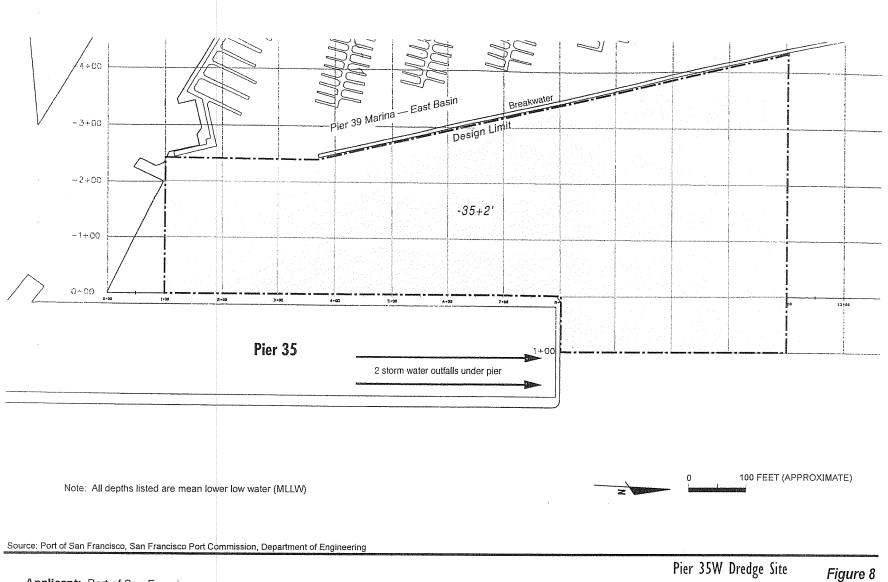
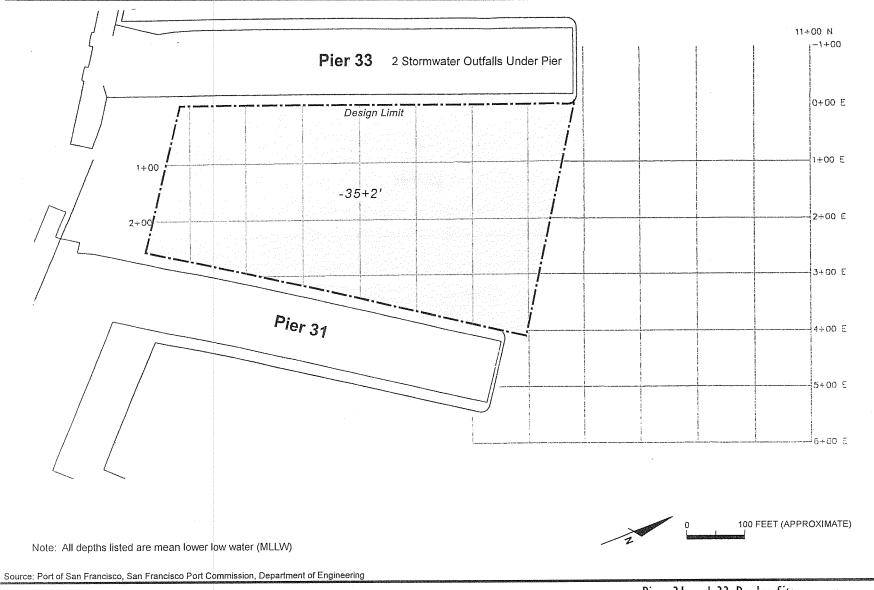


Figure 7

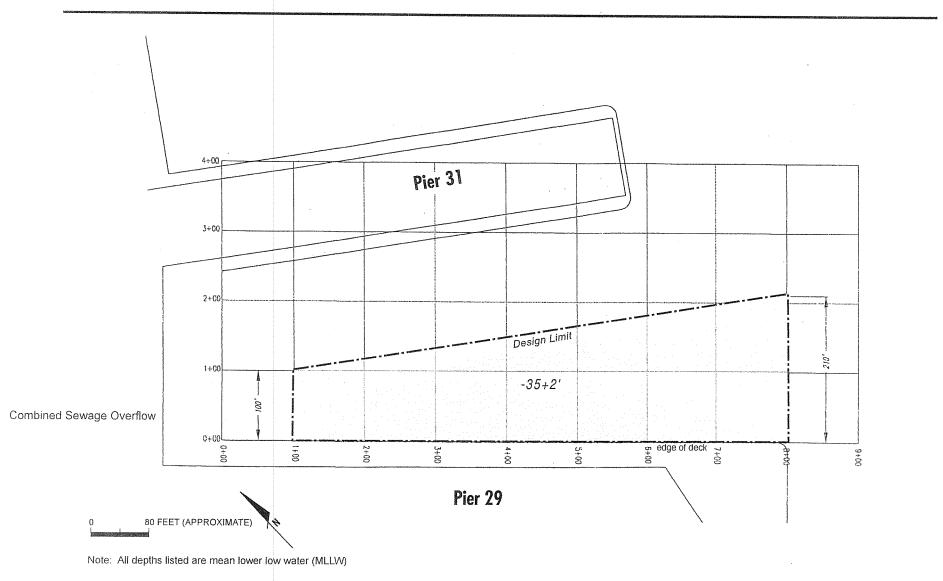


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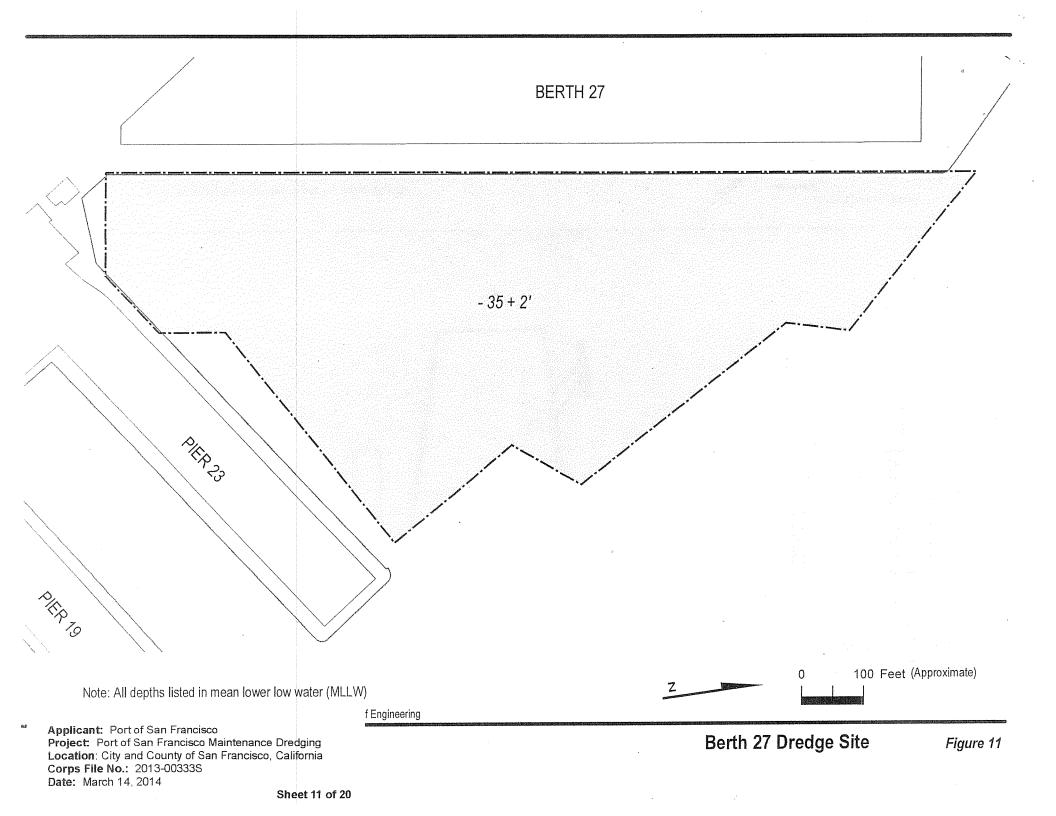
Piers 31 and 33 Dredge Site Figure 9

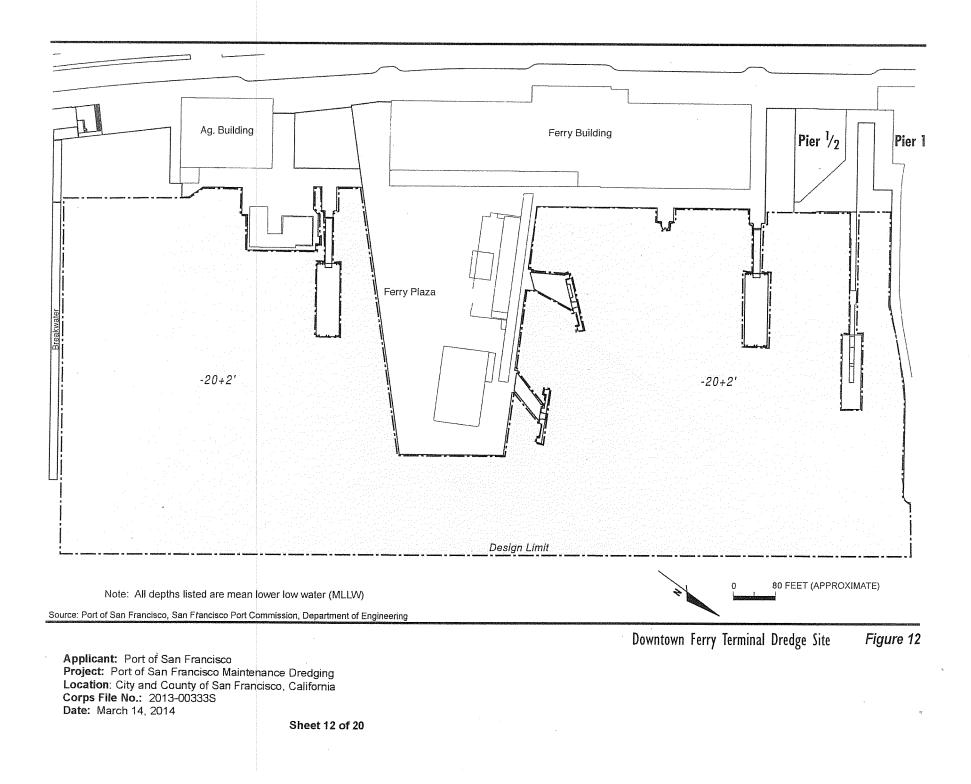


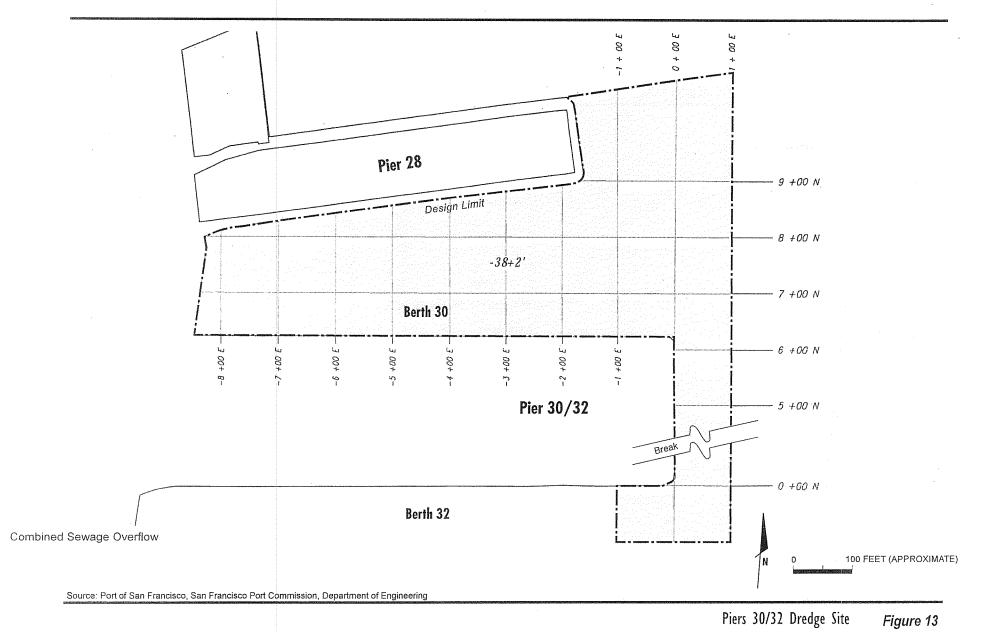
Applicant: Port of San Francisco Project: Port of San Francisco Maintenance Dredging Location: City and County of San Francisco, California Corps File No.: 2013-00333S Date: March 14, 2014

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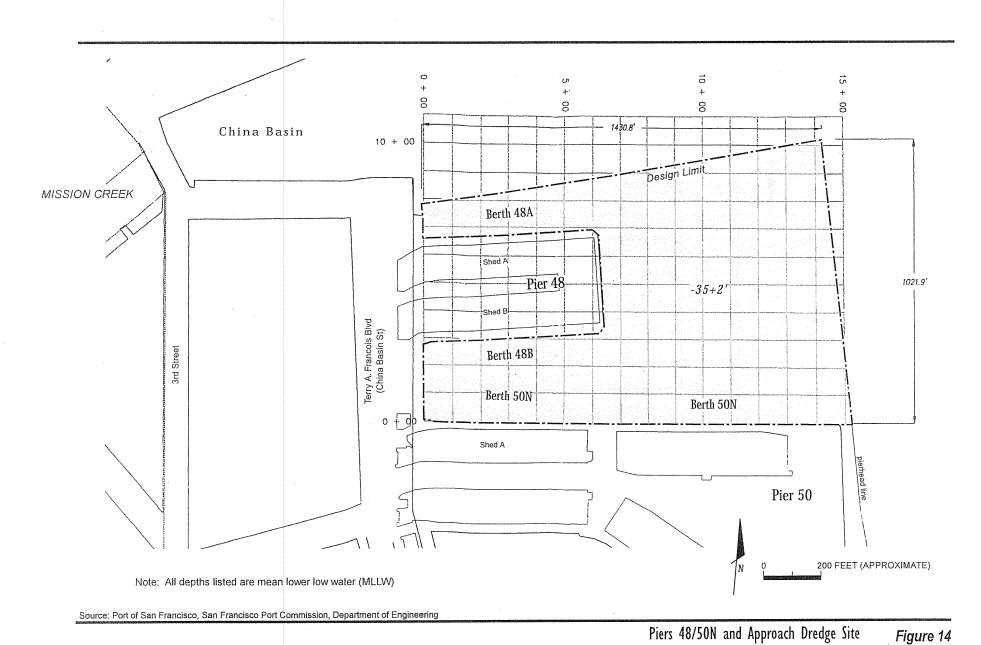
Pier 29 Dredge Site Figure 10



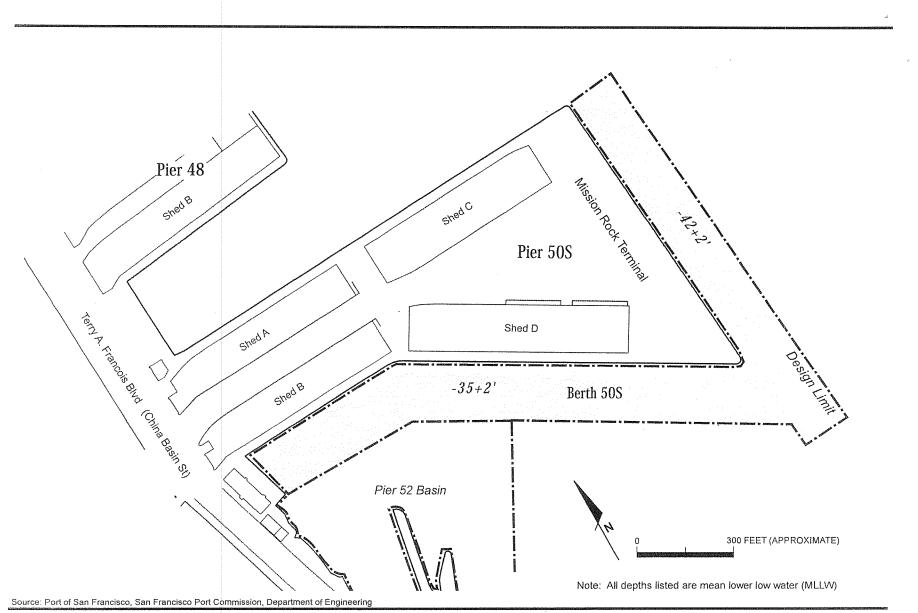




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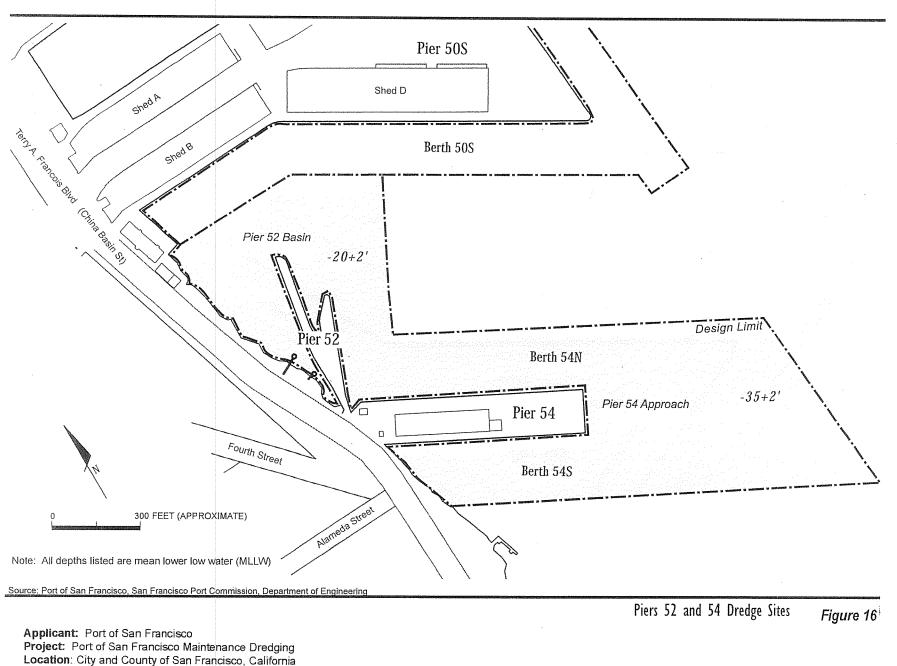
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Piers 50S Dredge Sites Figure 15

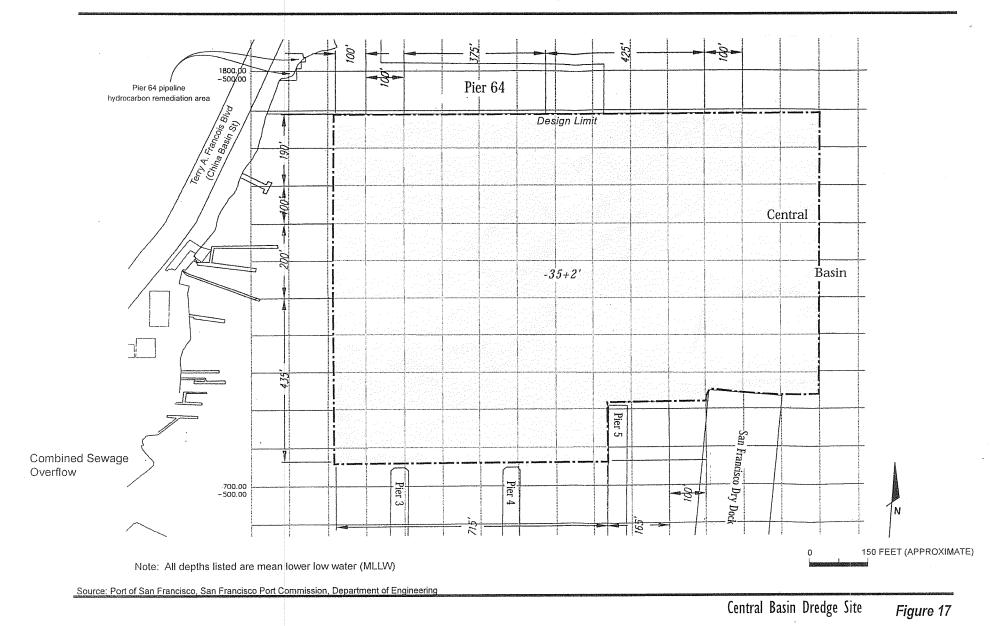
Applicant: Port of San Francisco Project: Port of San Francisco Maintenance Dredging Location: City and County of San Francisco, California Corps File No.: 2013-00333S Date: March 14, 2014

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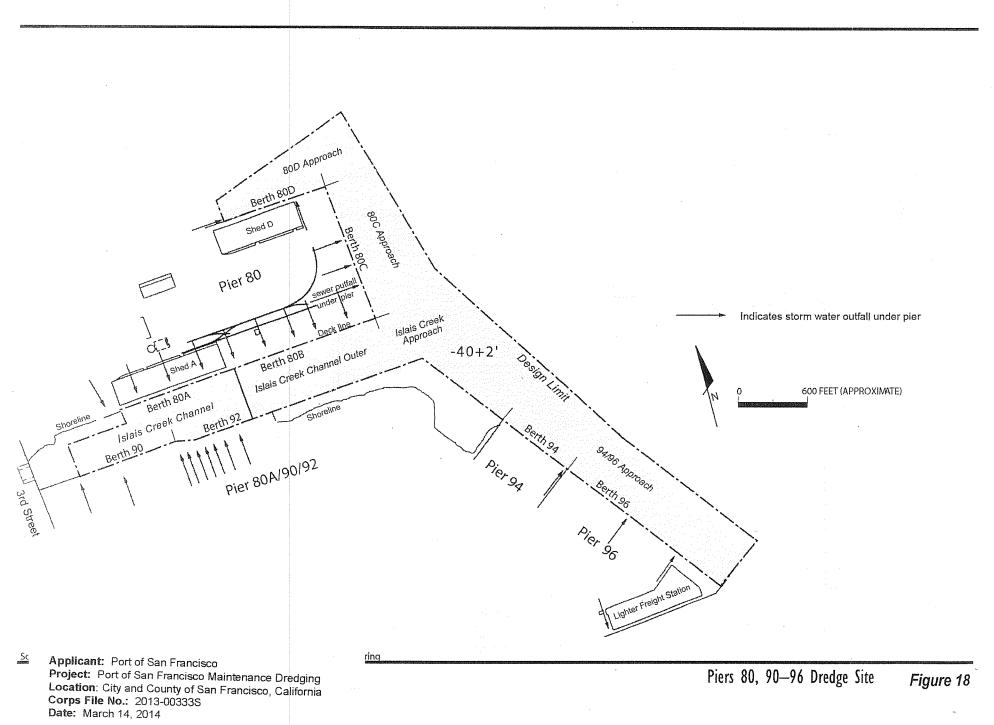


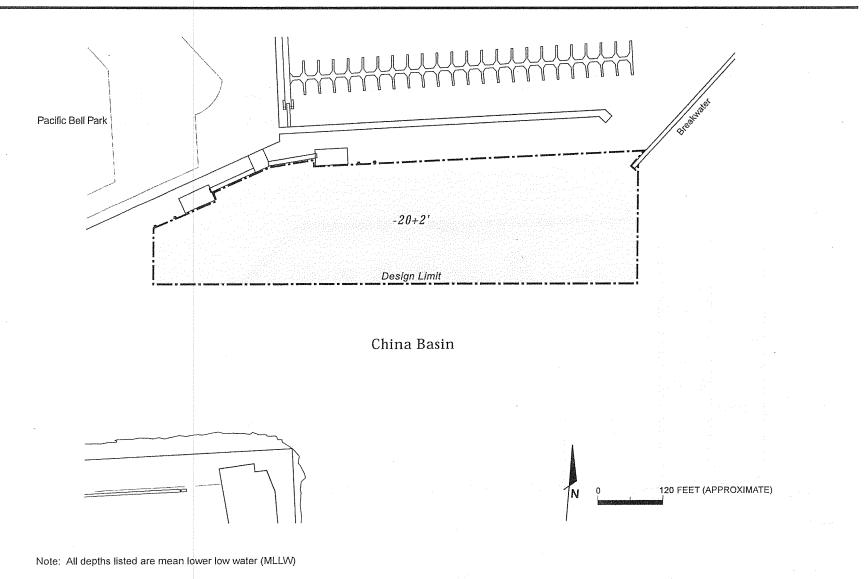
Corps File No.: 2013-00333S Date: March 14, 2014

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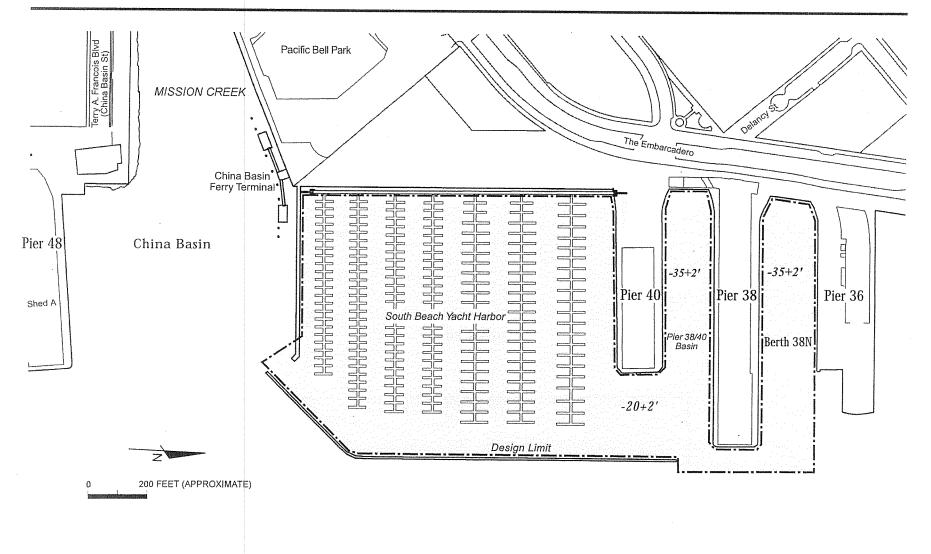
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Applicant: Port of San Francisco Project: Port of San Francisco Maintenance Dredging Location: City and County of San Francisco, California Corps File No.: 2013-00333S Date: March 14, 2014 China Basin Dredge Site Figure 19

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Note: All depths listed are mean lower low water (MLLW)

Applicant: Port of San Francisco Project: Port of San Francisco Maintenance Dredging Location: City and County of San Francisco, California Corps File No.: 2013-00333S Date: March 14, 2014

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South Beach Yacht Harbor Piers 38 and 40 Dredge Site Figure 20



EDMUND G. BROWN JR.

MATTHEW RODRIQUEZ SECRETARY FOR ENVIRONMENTAL PROTECTION

San Francisco Bay Regional Water Quality Control Board

Sent via email to Jay.Ach@sfport.com

July 29, 2014 CIWQS Place ID 735444

Port of San Francisco Attn.: Mr. Jay Ach, Manager of Regulatory & Environmental Affairs Port of San Francisco, Pier 1 San Francisco, CA 94111

Subject: Water Quality Certification, Maintenance Dredging Program for 2014 through 2023 at the Port of San Francisco in the City and County of San Francisco

Dear Mr. Ach:

We have reviewed and hereby issue certification for the Port of San Francisco's (Port's) application to perform maintenance dredging at the Port's maritime facilities, located along the San Francisco waterfront extending from the historic Hyde Street pier to Heron's Head Park south of Pier 96 (Figure 1). The Port has applied for reissuance of a U.S. Army Corps of Engineers individual permit authorizing multiple episodes of dredging over a 10-year period (Corps File No. 2013 - 00333S) pursuant to section 404 of the Clean Water Act (33 USC 1344) (CWA) and section 10 of the Rivers and Harbors Act of 1899 (33 USC 403). Correspondingly, the Port has applied to the San Francisco Bay Regional Water Quality Control Board (Water Board) for a CWA section 401 water quality certification that the project will not violate State water quality standards.

Project

Maintenance Dredging

The Port conducts a maintenance dredging program to maintain safe navigation depths at its various facilities, which include deepwater berths serving cargo and cruise ships, commercial and recreational fishing vessel harbors and berths, a passenger ferry terminal, and small craft recreational marinas (see figures 3 through 21). The project involves mechanically dredging sediment from berths and marinas and adjacent to piers located along the San Francisco waterfront, as well as disposal and beneficial reuse of dredged material created by these activities, over a period of approximately 10 years, from the date of this certification through December 31, 2023. Dredging areas (footprints) are limited to the faces, approaches, and entrance channels to each berthing area up to the adjacent pier. The Port anticipates dredging a maximum of 4.4 million cubic yards (cy) of material during this period. Currently authorized project depths and estimated dredging volumes for berths and marinas at the Port are listed below in Table 1.

DR. TERRY F. YOUNG, CHAIR | BRUCE H. WOLFE, EXECUTIVE OFFICER 1515 Clay St., Suite 1400, Oakland, CA 94612 | www.waterboards.ca.gov/sanfranciscobay

Table 1. Port of San France	isco Dredging Locations,	Project Depths, and Estimated
Dredging Volum	es	

Location	Project Depth ¹ (feet MLLW)	Surface Area of Permitted Boundary (Acres)	Estimated 10-Year Dredging Volume ² (cubic yards)	Figure No.
Pier 9 South Berth	-20	3.6	20,000	2
Pier 9 North Berth	-35	3.5	20,000	2
Pier 15/17 Face	-40	1.4	6,000	2
Inner Fisherman's Wharf	-12	3.7	30,000	3
Outer Fisherman's Wharf	-20	48.7	150,000	3
Pier 45 E/43 ¹ / ₂ Berths	-35	5.8	100,000	4
Pier 43/41 Berths	-20	9.2	40,000	5
Pier 39 (East & West Marina	-12	20.0	120,000	6
Basins)				
Pier 35 East Berth	-35	11.6	800,000	7
Pier 35 West Berth	-35	8.1	830,000	8
Pier 33/31 (Hornblower) Berths	-35	5.3	30,000	9
Pier 29 Berth	-35	2.5	30,000	10
Pier 27 Berth	-35	9.6	710,000	11
Downtown Ferry Terminal, Ferry	-20	19.1	40,000	12
Plaza, Pier 1/2 and 1E Berth				
Pier 28 E to 30/32 Berths	-38	6.8	100,000	13
Pier 48/50 N Berths & Approach	-35	23.4	60,000	14
Pier 50 South Face	-42	5.3	20,000	15
Pier 50 South Berth	-35	6.7	40,000	15
Pier 52 Basin	-20	8.4	24,000	16
Pier 54 N & S Berths & Approach	-35	17.7	30,000	16
Central Basin	-35	25.6	160,000	17
Piers 80, 90, 92 Berths, Islais	-40	35.7	500,000	18
Creek Channel, Approach				
Channels				
Pier 94/96 Berths and Approach	-40		250,000	18
Channels		81.0		
China Basin	-20	4.2	30,000	19
South Beach Yacht Harbor	-20	23.6	160,000	20
Pier 36/38 N Berths	-35	4.2	50,000	20
Pier 38 S/40 Berths	-35	6.9	50,000	20
Total for all locations		402	4,400,000	

¹ These depths do not include the 2-foot overdredge allowance authorized at each dredging location.

² The dredge limit for berths listed as one dredging location generally extends from pier to pier. Proposed footprints for this 10-yr dredging cycle are as shown in the figures accompanying this certification.

Knock-Down Dredging

The Port may need to occasionally perform knock-down dredging, or grading of underwater shoals, to supplement routine maintenance dredging episodes. Knock-down dredging is the redistribution of shoaled sediments within a project area, as opposed to regular maintenance

Port of San Francisco

2014-2023 Maintenance Dredging Water Quality Certification

dredging, in which shoaled sediments are removed completely. Knock-down dredging is performed by dragging an I-beam towed by a boat across a shoal in order to redistribute the shoaled material within the project area. In areas where a towed I-beam could damage the face of a wharf, knock-downs can alternatively be performed by excavating shoaled material with a small clamshell bucket, raising it slightly above the bottom, and releasing the material near the bottom in a deeper area within the berth. The equipment for performing knock-down dredging can be mobilized more quickly and less expensively than normal dredging equipment. Knockdown dredging will be most useful in supplementing routine maintenance dredging when time constraints may not allow for normal dredging or when a shoal threatening navigation covers a small area of a project area that is otherwise at or below its permitted depth.

Disposal and/or Reuse of Dredged Material

In June 2014, the Port submitted an Integrated Alternatives Analysis (IAA) of disposal options for dredged material removed from the Port's waterfront maritime facilities in accordance with CWA section 404(b)(1). In July 2014, the Port submitted a revised table of dredged material placement volume allocations covering a three-year period (2013-2015), in which the Port commits to placing at least 77% of its maintenance dredging volume outside San Francisco Bay (i.e., 75.5% at the SF-DODS ocean disposal site and 1.6% upland). The remaining volume of dredged material (up to 23% of the total) will be placed at the Alcatraz Island aquatic disposal site (SF-11). Taking 77% of The Port's dredged material to an alternative placement location outside the Bay is consistent with the Long Term Management Strategy for Dredging (LTMS) program goals after 2012, which direct most material away from in-bay unconfined aquatic disposal as alternatives for material that cannot be beneficially reused.

For years 2016 – 2023, prior to obtaining written approval for future dredging episodes per Condition 6 of this certification, the Port will need to submit an additional IAA, acceptable to the Executive Officer, which evaluates the feasibility of using a variety of dredged material disposal and/or reuse locations other than in-bay disposal.

Approval of Dredging and Dredged Material Disposal Episodes

This certification requires that individual episodes of maintenance dredging, knock-down dredging, and dredged material disposal be approved by the Executive Officer prior to episode initiation (Condition 6). Episode approval will be coordinated through the multi-agency Dredged Material Management Office (DMMO), of which the Water Board is a member. We will consider approval of dredging episodes based on the results of a tiered sediment testing framework conducted according to applicable federal and State guidance and an analysis of practicable alternatives to aquatic disposal pursuant to CWA section 404(b)(1).

<u>Potential Threat to Water Quality & Risk to Beneficial Uses Posed by PAHs in Sediment at Pier</u> <u>39 Marina and Need for Further Investigation</u>

As explained below, the information required by Condition 11 of this certification is necessary to determine whether sediment cleanup actions are needed in portions of the Pier 39 Marina East and West Basins.

Port of San Francisco 2014-2023 Maintenance Dredging Water Quality Certification

Polycyclic aromatic hydrocarbons (PAHs) can enter San Francisco Bay sediment from a variety of anthropogenic sources that include discharges of unburned petroleum fuels and creosote from treated marine piles. PAHs are known to cause cancer, reproductive anomalies, and immune dysfunction; to impair growth and development; and to cause other impairments in benthic-dwelling fish exposed to sediment-associated PAHs both by direct contact with sediment and also through a diet of benthic invertebrate prey that can accumulate sediment-associated PAHs.

<u>Pre-dredge</u> sediment characterization testing conducted in 2012 in portions of the Pier 39 Marina (the areas labeled DU-1 in the East Basin and DU-3 in the West Basin – Figure 21) showed elevated concentrations of total PAHs in the sediment proposed for dredging: up to 15 times ambient concentrations in San Francisco Bay sediment. We conditioned approval of the 2012 dredging episode by requiring sampling and analysis for residual total PAHs in the exposed sediment surface (i.e., the z-layer, which is the top 6 inches of exposed sediment after completion of dredging). This was consistent with the requirements of the U.S. EPA's and U.S. Army Corps of Engineers' Programmatic Consultation on Essential Fish Habitat (EFH) Agreement with the National Marine Fisheries Service, dated June 9, 2011.

Dredging was completed in August 2012 and <u>post-dredge</u> sediment surface samples were collected in January 2013. The results of the post-dredge sediment surface testing are presented in the report prepared by Pacific EcoRisk: *Characterization of the Pier 39 Marina East and West Basin Z-Layer Sediments: Sampling and Analysis Results*, dated March 2013, and are summarized in the following table:

Sample Location Identifier	Total PAH Concentration (μg/kg dry wt.)	SF Bay Ambient (μg/kg dry wt.) (SFRWQCB 1998)	SF Bay 2014 Dredged Material Bioaccumulation Testing Threshold (µg/kg dry wt.)
P39E-DU1-01-Z	94,549		
P39E-DU1-01-Z Duplicate	41,459		
P39E-DU1-02-Z	14,883		
P39E-DU1-03-Z	11,425	3,390	4,500 ^a
P39E-DU1-04-Z	19,807		
P39E-DU1-06-Z	11,023		
P39W-DU3-03-Z	349,270		
P39W-DU3-04-Z	25,191		

a. The San Francisco Estuary Institute hosts a <u>Dredged Material Testing Thresholds</u> webpage that explains how the bioaccumulation testing threshold for PAHs is calculated using Regional Monitoring Program ambient sediment chemistry data.

The post-dredge analytical results above show even higher total PAH concentrations remaining in the exposed surface sediment after dredging than in the overlying sediment that was removed. This may not meet the requirements of San Francisco Bay Basin Water Quality Control Plan

Port of San Francisco

2014-2023 Maintenance Dredging Water Quality Certification

Page 5

(Basin Plan) objectives 3.3.2, Bioaccumulation, which prohibits detrimental increases in concentrations of toxic substances in bottom sediments or aquatic life, and 3.3.18, Toxicity, which prohibits acute and chronic toxicity in ambient waters.

Because the sediment accretion rate is relatively slow in the marina, PAH-contaminated sediment may remain exposed for a prolonged period of time. This marina experiences a high volume of vessel traffic from ferries, the high speed "RocketBoat" tourist attraction, and smaller recreational vessels, which may resuspend and spread PAH-contaminated sediment beyond the current dredging footprint. Thus, there is a significant potential risk of impacts to beneficial uses from this contaminated sediment. For these reasons, the Water Board is requiring submission of the technical reports described in Condition 11 and may require cleanup actions to address impacts due to contaminated sediment, including the referenced PAH-contaminated sediment. The burden, including the costs of investigating the contamination, is reasonable in relation to the significant risks potentially present, as evidenced by the data collected to date.

California Environmental Quality Act

The project is categorically exempt from the requirements of the California Environmental Quality Act pursuant to Title 14 of the California Code of Regulations, section 15304(g), minor alterations to land—maintenance dredging.

Certification and Coverage under General Waste Discharge Requirements

I hereby issue an order certifying that any discharge from the referenced project, as conditioned by this Certification and Order, will comply with the applicable provisions of CWA sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards), and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this Water Quality Certification. The following conditions are associated with this certification:

Period of Certification

1. This certification is valid through December 31, 2023.

Dredging and Disposal Operations

- 2. Dredging shall be limited to the project depths and overdepth allowances shown in Table 1 and to the maintenance dredging footprints shown in the attached figures 2 through 20.
- 3. No overflow or decant water shall be discharged from any barge at any time.
- 4. Knock-down dredging shall be limited to 2,500 cy per event and a maximum of 5,000 cy per year from within the Port's approved dredging footprint as shown in figures 2 through 20. The Port shall submit pre- and post-grading soundings for each knock-down event showing that the material was redistributed within the berth, not removed from the berth.

5. During calendar years 2014-2015, the Port shall place no more than 23% of the sediment dredged from its maritime facilities at unconfined in-bay aquatic disposal sites (i.e., SF-10 and SF-11) and at least 77% at out-of-bay beneficial reuse (e.g., the Cullinan Ranch and Montezuma Wetland restoration projects and the Winter Island Levee) or disposal (e.g., SF-DODS) sites.

Episode Approval

- 6. Individual maintenance dredging, knock-down dredging, and disposal episodes shall not commence until authorized in writing by Water Board staff, following review by the DMMO. Project descriptions, requests for dredged material suitability determinations, and evaluations of disposal alternatives shall be reviewed by the DMMO. The Port shall follow applicable federal and State guidance on a tiered testing framework and on the preparation of reports.
- 7. If the Port plans to propose disposing dredged material in waters of the U.S. during the years 2016-2023, then, as a part of obtaining episode approvals for future dredging events, the Port shall submit an evaluation of disposal sites pursuant to CWA section 404(b)(1) and consistent with the goals of the LTMS Management Plan. The Port may either submit an analysis for each individual dredging episode or it may submit one or more IAAs, acceptable to the Executive Officer, for the remaining eight-year period of this certification. Evaluations shall include analyses of the feasibility of the following beneficial reuse and disposal options, and any others that are potentially available at the time of the analysis:
 - Tidal and sub-tidal habitat creation or restoration
 - Levee maintenance
 - Construction fill for grading
 - Open ocean disposal at SF-DODS
 - Upland disposal

Protection of Special Status Species

8. Dredging and disposal activities shall be limited to the work windows established by the California Department of Fish and Wildlife (CDFW), the National Marine Fisheries Service (NMFS), and the U.S. Fish and Wildlife Service (USFWS) in their Biological Opinions on the Long Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region, unless written authorization by the appropriate agencies to work outside these windows is provided to Water Board staff. As shown in the following table, the applicable work window for this dredging project is June 1 through November 30 of any year.

Species of Concern	Work Window Period	Consulting Agency
Pacific Herring	March 1 through November 30	CDFW
Chinook Salmon	June 1 through November 30	NMFS, CDFW*
Steelhead Trout	June 1 through November 30	NMFS

*If a federal agency and CDFW are both listed, CDFW generally defers to the federal agency.

2014-2023 Maintenance Dredging Water Quality Certification

9. This certification does not allow for the take, or incidental take, of any special status species. The Port is required, as prescribed in the State and federal endangered species acts, to consult with the appropriate agencies prior to commencement of the project. The Port shall use the appropriate protocols, as approved by CDFW, NMFS, and/or USFWS, to ensure that project activities do not adversely impact Preservation of Rare and Endangered Species, a beneficial use of San Francisco Bay and its tributaries as set forth in the Basin Plan.

<u>Requirement for a Technical Report – In-Bay Disposal Monitoring</u>

10. The Port shall provide a technical report that documents monitoring efforts designed to evaluate the water quality impacts of the dredged material discharge on waters of the State, pursuant to California Water Code (Water Code) section 13267.

Regional Monitoring Program

Please be aware that Condition 10 is an order for a technical report pursuant to Water Code section 13267. Dischargers of waste materials to the Bay, including those who dispose of dredged material, are required to monitor the impacts of their discharges under section 13267. This monitoring provides necessary information about ambient Bay water quality and potential long-term impacts of dredged material disposal. The Port may elect to participate in the San Francisco Estuary Regional Monitoring Program for Trace Substances (RMP) to fulfill this requirement or provide comparable data on an individual basis. The RMP is a coordinated and comprehensive long-term monitoring program with the goal of monitoring water and sediment quality to provide the scientific foundation for managing and improving the health of the San Francisco Bay aquatic ecosystem. Additionally, the RMP provides for special and pilot studies of interest to program participants.

Since 1992, many Bay Area dischargers have decided to provide this information through the RMP rather than through individual monitoring programs. The San Francisco Estuary Institute (SFEI), located in Richmond, administers the program with oversight by the Water Board. Dischargers may contribute money to the RMP, based on the RMP Dredger Fee Schedule Policy and any subsequent amendments, as approved by the RMP Steering Committee. The fees will be based on in-bay dredge disposal volumes calculated using post-dredge survey results provided to the Water Board and SFEI by the U.S. Army Corps of Engineers. If the post-dredge survey volumes for each fiscal year ending June 30 are not reported to the Water Board by September 1 of the next fiscal year (same calendar year), RMP dredger participants will be billed based on reported bin volumes, which may overestimate the volume actually dredged. The Water Board recognizes payments to the RMP as fulfilling requirements to provide information on water quality impacts under section 13267.

<u>Requirement for a Technical Report – Investigation of Threat to Water Quality & Risk to Aquatic</u> <u>Environment Posed by PAHs in Sediment at Pier 39 Marina</u>

11. The Port shall submit a technical report characterizing the potential threat to water quality and risk to aquatic life posed by PAHs in sediment at the Pier 39 Marina.

By not later than October 31, 2014, the Port shall submit a work plan and schedule for completing the investigation described below and submitting the results to the Water Board.

Port of San Francisco 2014-2023 Maintenance Dredging Water Quality Certification

- a. Evaluate the potential impacts of PAHs in exposed surface sediment to beneficial uses in San Francisco Bay. The beneficial uses to be considered are those set forth in the Basin Plan for Central San Francisco Bay (i.e., commercial and sport fishing, estuarine habitat, fish migration, fish spawning, shellfish harvesting, water contact recreation, wildlife habitat, and protection of threatened and endangered species). This may include biological testing (e.g., benthic invertebrate toxicity and bioaccumulation) to determine adverse impacts to the aquatic food web, including benthic-dwelling fish species.
- b. Characterize the lateral and vertical extent of elevated PAH concentrations in sediment in the portions of the Pier 39 Marina currently permitted for dredging and likely to be dredged in the future.
- c. Investigate potential ongoing sources of PAH contamination to sediment within the Pier 39 Marina East and West Basins (e.g., shoreline petroleum seeps and creosote-treated piles) and identify measures to appropriately prevent and minimize further PAH discharges from those sources.

This requirement to investigate and characterize PAH contamination in Pier 39 Marina sediments, including the requirement to submit a work plan and schedule, is a requirement for technical reports made pursuant to Water Code section 13267, which allows the Water Board to require technical or monitoring program reports from any person who has discharged, discharges, proposes to discharge, or is suspected of discharging waste that could affect water quality. All reports required herein must be submitted acceptable to the Executive Officer. The attachment provides additional information about section 13267 requirements. Any extension in the above deadline must be confirmed in writing by Water Board staff.

Standard Conditions

- 12. The Port or its representative shall notify Water Board staff immediately by telephone and email whenever an adverse condition occurs as a result of this activity. An adverse condition includes, but is not limited to, a violation or threatened violation of conditions of this certification, or a release of petroleum products or toxic chemicals to waters of the State. Pursuant to Water Code section 13267, a written notification of adverse condition shall be submitted to the Water Board within 30 days of occurrence. The written notification shall identify the adverse condition, describe the action necessary to remedy the condition, and specify a timetable, subject to the modifications of the Water Board, for remedial actions.
- 13. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the Water Code and section 3867 of Title 23 of the California Code of Regulations (23 CCR).
- 14. This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR subsection 3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

15. Certification is conditioned upon full payment of the required fee as set forth in 23 CCR section 3833. The total fee required for certification of the subject project is \$75,071. Water Board staff received payment in full on June 6, 2014.

Conclusion

This water quality certification applies to the project as proposed in the application materials. Please be advised that failure to implement the project as proposed is a violation of this certification. Any violation of certification conditions is subject to administrative civil liability pursuant to Water Code sections 13268 and 13350. Failure to meet any condition of a certification may subject the Port to civil liability imposed by the Water Board to a maximum of \$5,000 per violation day for violations of Water Code section 13267 technical report requirements and \$5,000 per violation day or \$10 for each gallon of waste discharged in violation of this certification.

We anticipate no further action on this request. Should new information come to our attention that indicates a water quality problem with this project, the Water Board may issue waste discharge requirements pursuant to 23 CCR section 3857.

If you have any questions, please contact Elizabeth Christian at (510) 622-2335, or by email, to echristian@waterboards.ca.gov.

Sincerely,

Guice V. Uly

Digitally signed by Bruce H. Wolfe DN: cn=Bruce H. Wolfe, o=SWRCB, ou=Region 2, email=bwolfe@waterboards.ca. gov, c=US Date: 2014.07.29 12:05:51 -07'00'

Bruce H. Wolfe Executive Officer

Attachments:

- Figure 1 Port of San Francisco Dredging Area Location Map
- Figure 2 Piers 9 and 15/17
- Figure 3 Inner and Outer Fisherman's Wharf (Piers 45 and 47)
- Figure 4 Pier 45 E
- Figure 5 Pier 43
- Figure 6 Pier 39 (East and West Marina Basins)
- Figure 7 Pier 35 East
- Figure 8 Pier 35 West
- Figure 9 Piers 31 and 33
- Figure 10 Pier 29
- Figure 11 Pier 27
- Figure 12 Downtown Ferry Terminal
- Figure 13 Piers 30/32

Figure 14 – Piers 48/50N Figure 15 – Pier 50 South Figure 16 – Piers 52 and 54 N&S Figure 17 – Central Basin Figure 18 – Piers 80, 90-96 Figure 19 – China Basin

Figure 20 – South Beach Yacht Harbor and Piers 38/40

Figure 21 – Pier 39 Marina East and West Basin Areas Above SF Bay Total PAH Bioaccumulation Trigger Level

Fact Sheet – Requirements for Submitting Technical Reports Under Section 13267 of the California Water Code

cc w/attachments (all via email):

State Water Resources Control Board (Stateboard401@waterboards.ca.gov) BCDC, San Francisco, CA (Brenda Goeden, brendag@bcdc.ca.gov) CA State Lands Commission, Sacramento, CA (Donn Oetzel, oetzeld@slc.ca.gov) DFW, Santa Rosa, CA (Arn Aarreberg, Arn.Aarreberg@wildlife.ca.gov) USACE, San Francisco, CA (Mark D'Avignon, mark.r.d'avignon@usace.army.mil) US EPA, WTR-8 (R9-WTR8-Mailbox@epa.gov) Christine Boudreau, Boudreau Associates (cboudreau@boudreaullc.com)



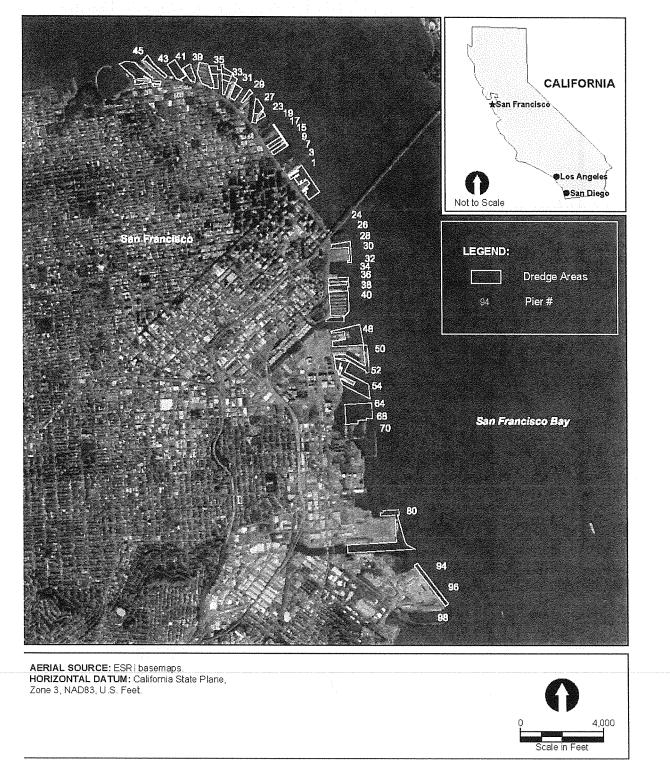
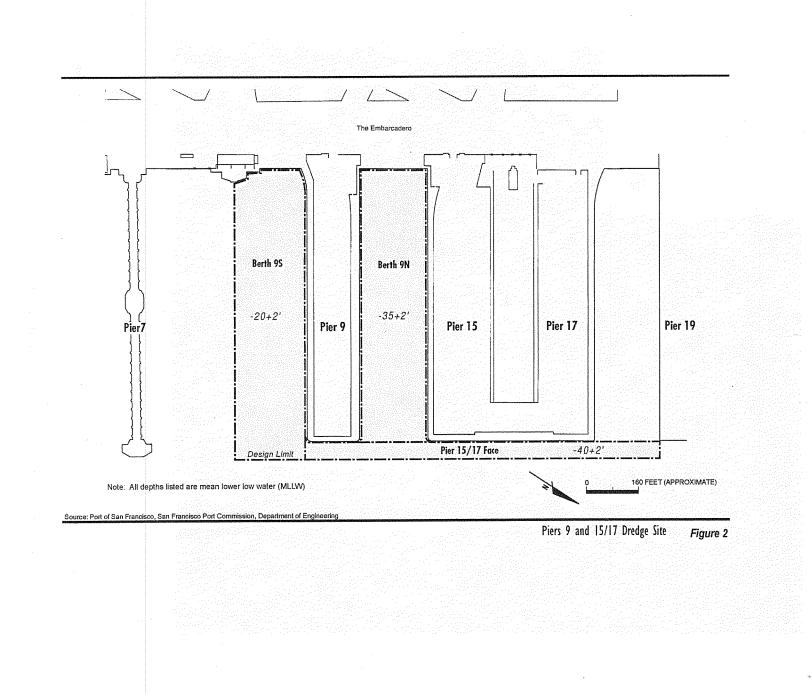
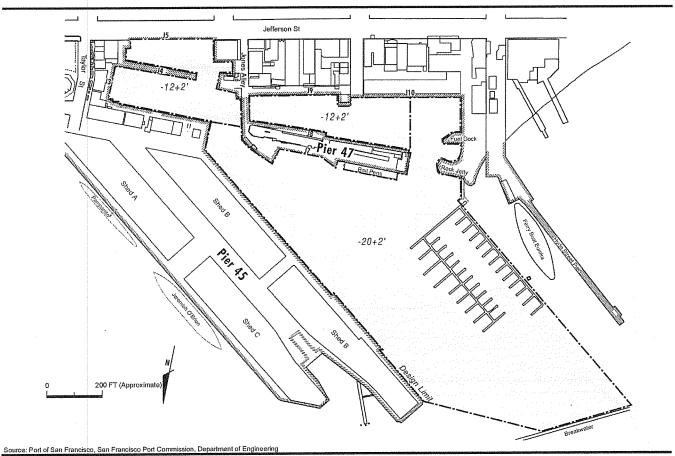


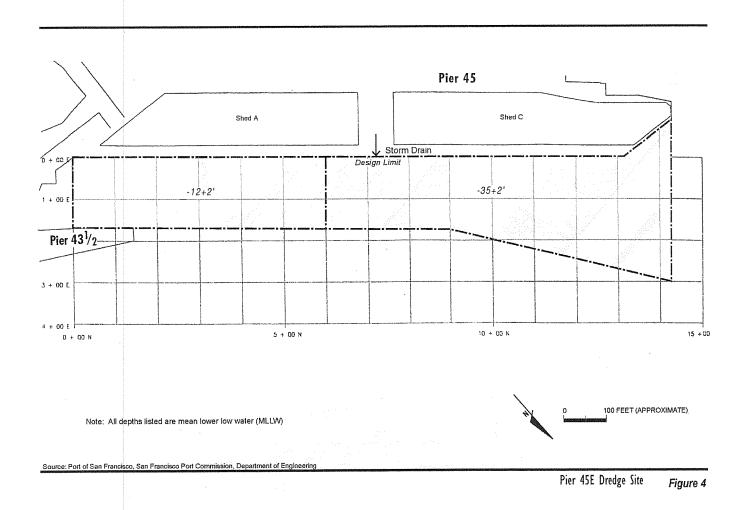
Figure 1. Port of San Francisco Dredging Area Location Map

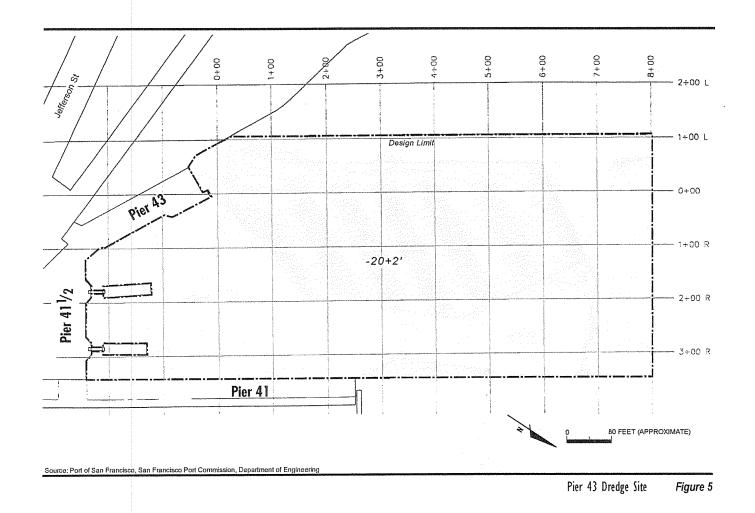
Port of San Francisco 2014-2023 Maintenance Dredging Water Quality Certification

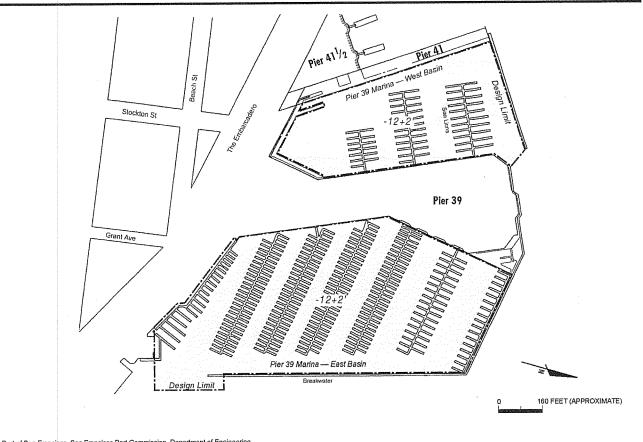




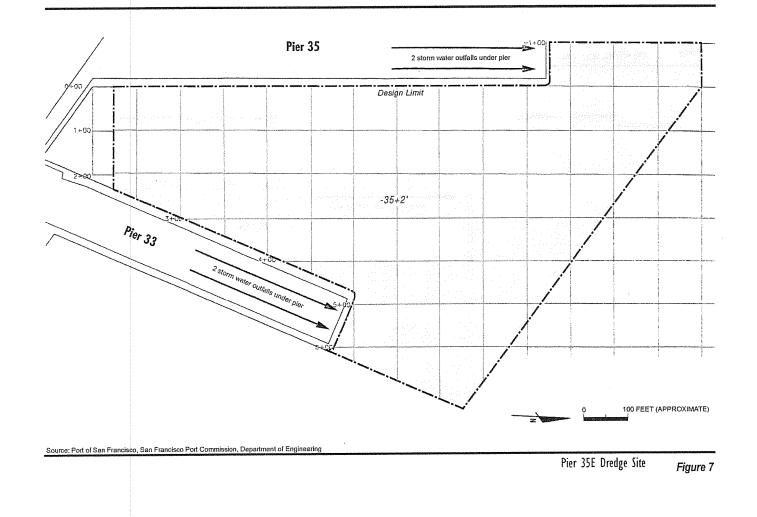
Fisherman's Wharf Piers 45 and 47 Dredge Site Figure 3

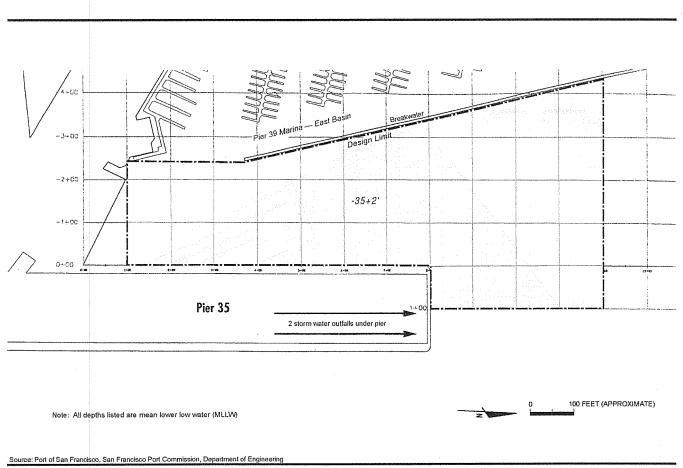




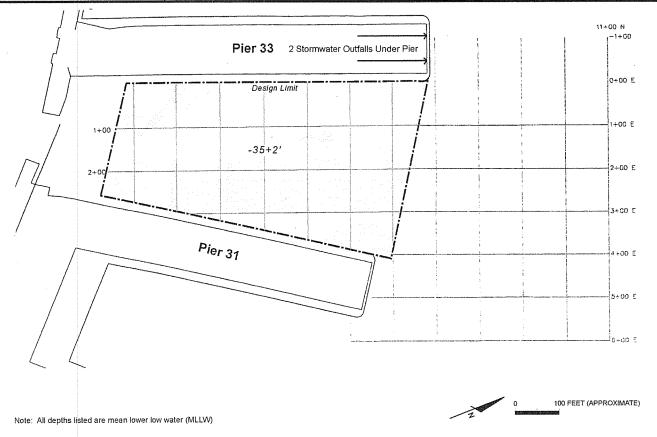


Pier 39 Dredge Sites Figure 6

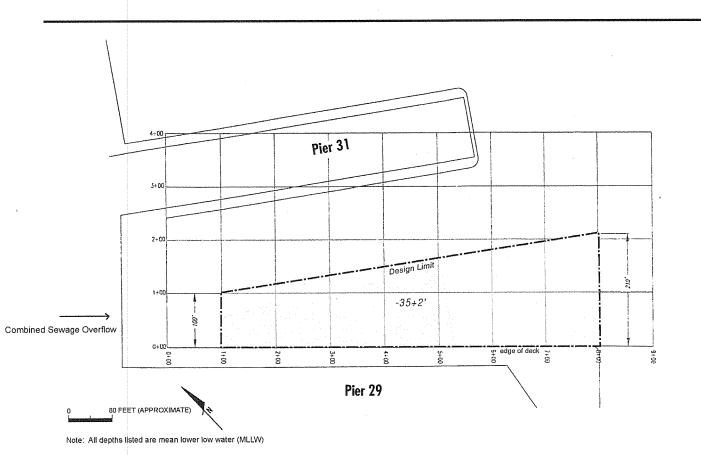




Pier 35W Dredge Site Figure 8

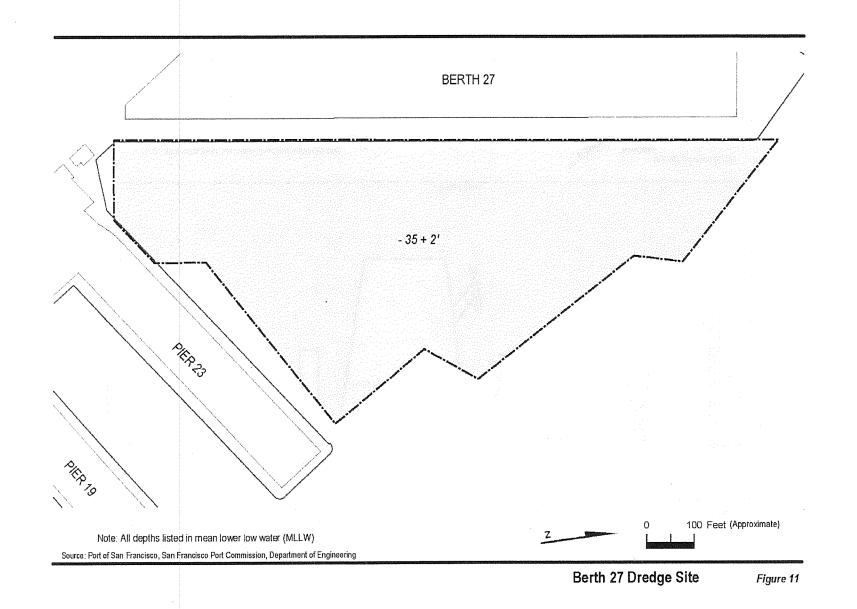


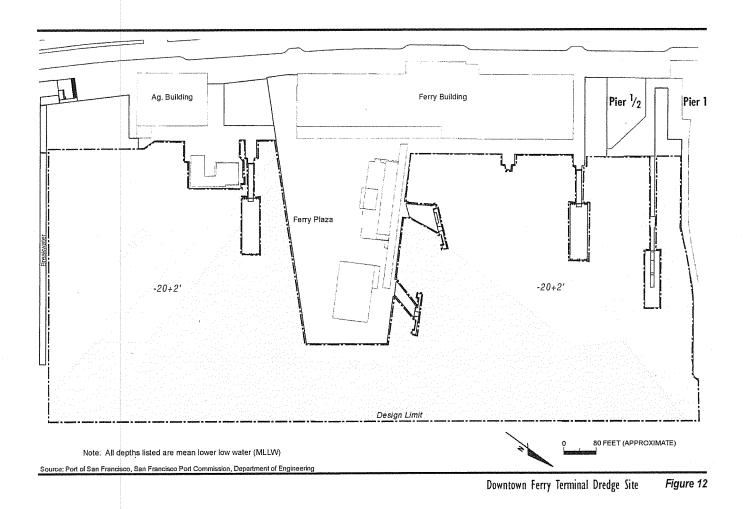
Piers 31 and 33 Dredge Site Figure 9

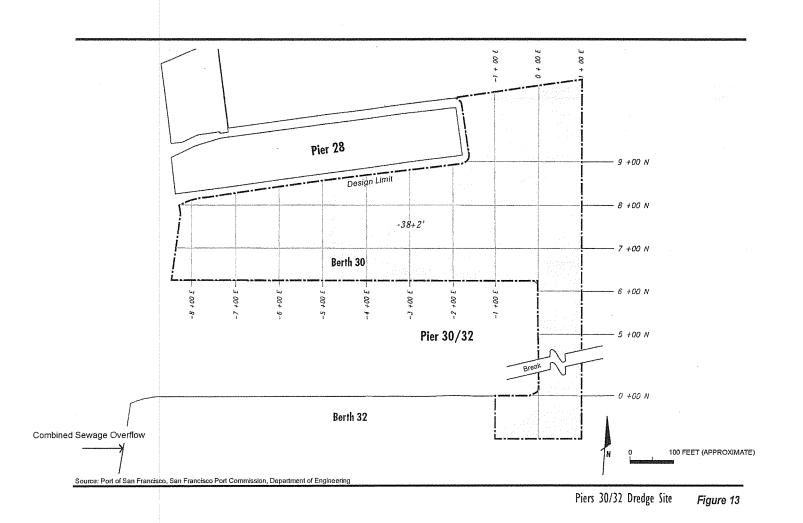


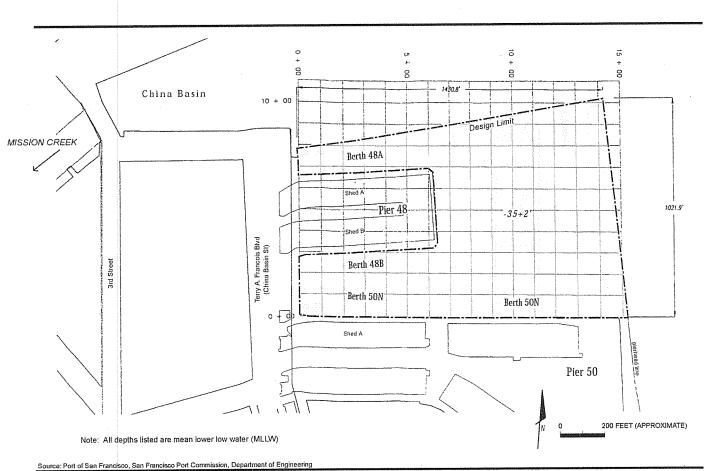
Pier 29 Dredge Site Figure 10

Port of San Francisco 2014-2023 Maintenance Dredging Water Quality Certification

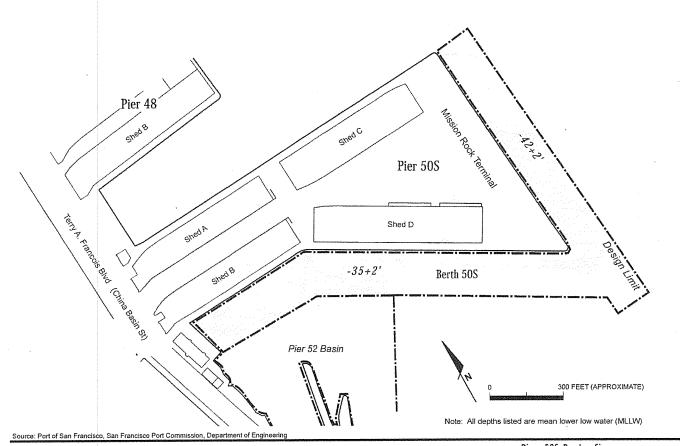


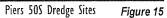


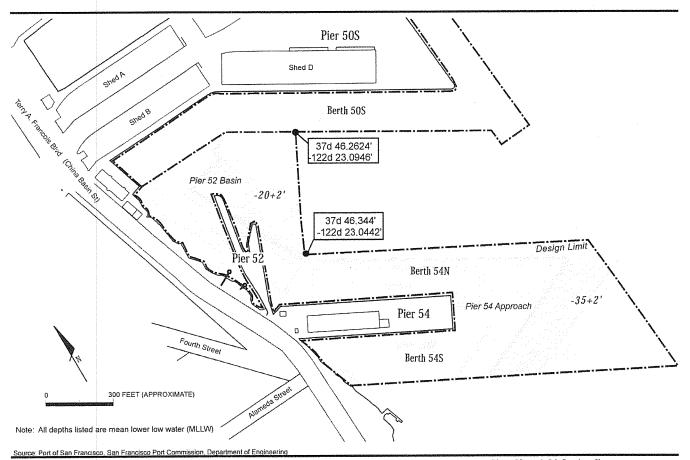




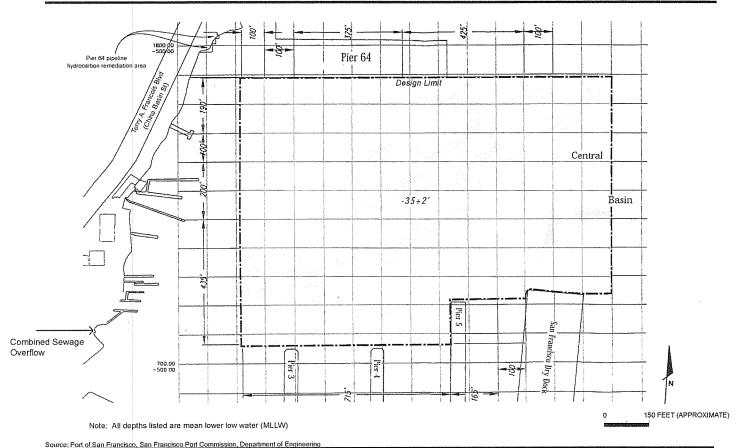
Piers 48/50N and Approach Dredge Site Figure 14





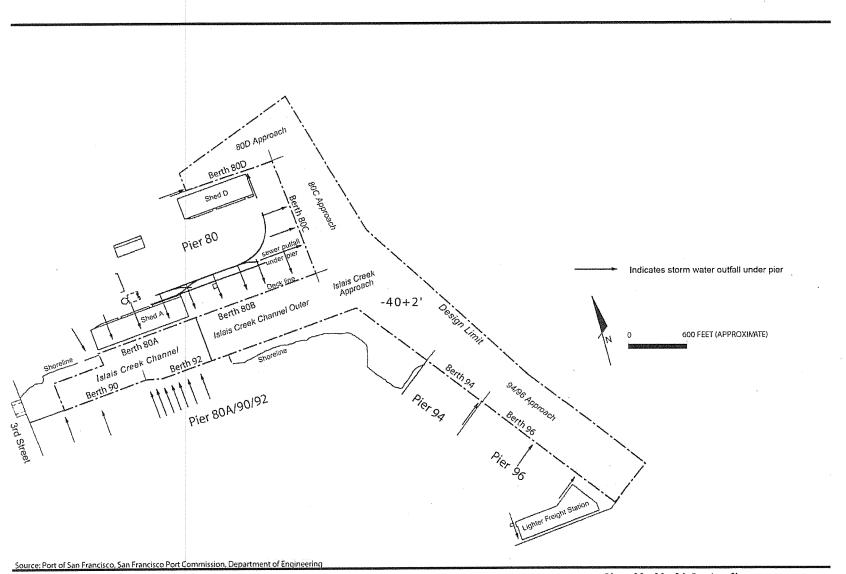


Piers 52 and 54 Dredge Sites Figure 16



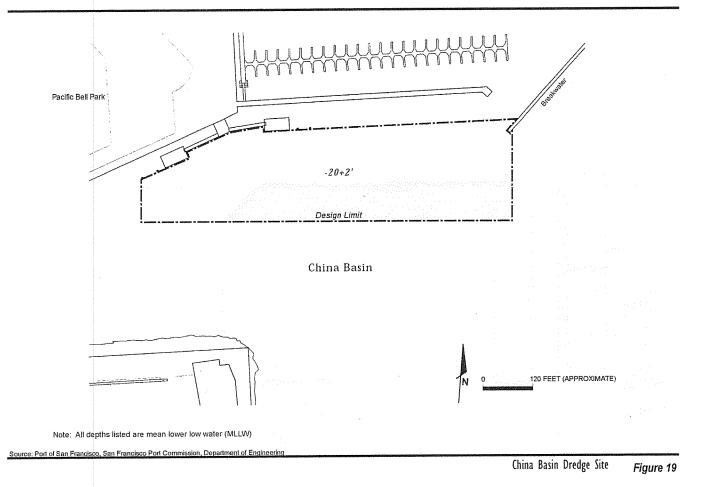
Central Basin Dredge Site Figure 17

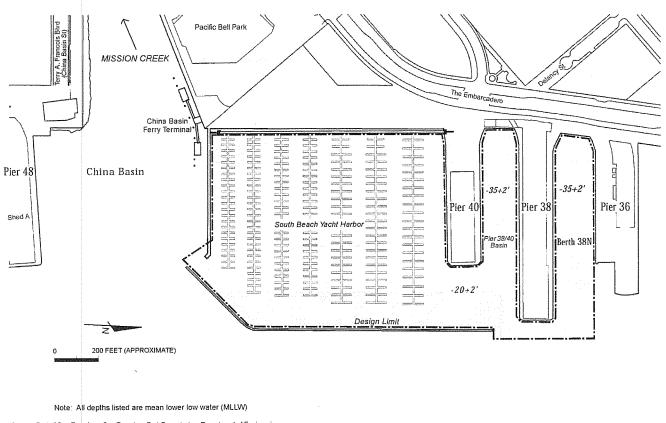
Port of San Francisco 2014-2023 Maintenance Dredging Water Quality Certification



Piers 80, 90-96 Dredge Site Figure 18

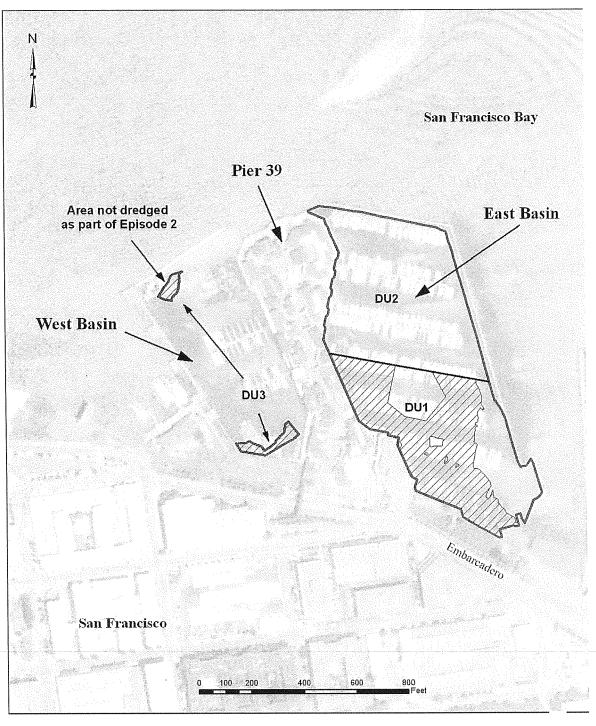
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Source: Port of San Francisco, San Francisco Port Commission, Department of Engineering

South Beach Yacht Harbor Piers 38 and 40 Dredge Site Figure 20

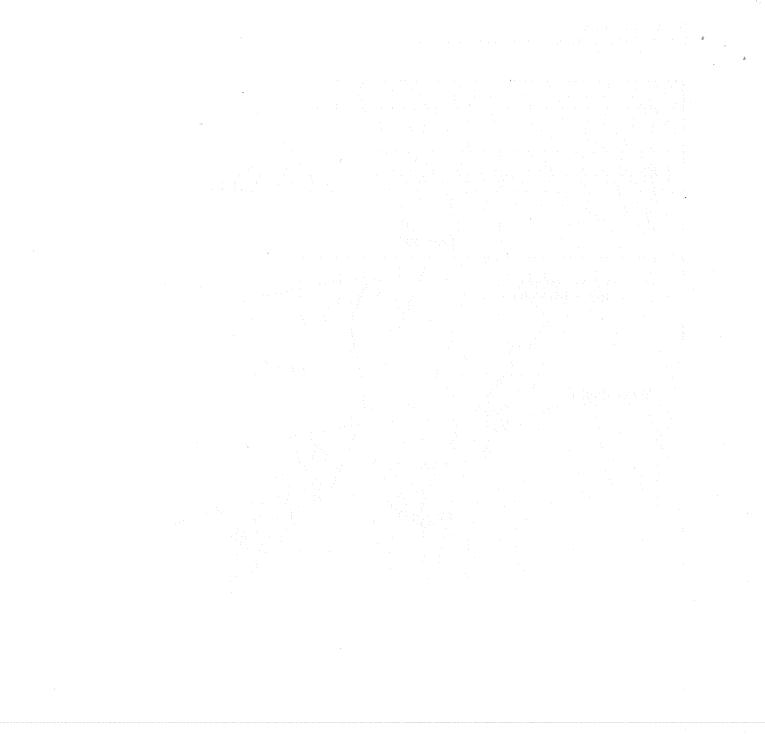


Legend



Total PAH > Essential Fish Habitat bioaccumulation trigger (USEPA/ESACE 2012)

Figure 21. Pier 39 Marina East and West Basin Areas Above S.F. Bay Total PAH Bioaccumulation Trigger Level





Mr. Jay Ach Port of San Francisco Pier 1 San Francisco, California 94111

Ladies and Gentlemen:

I. Authorization

A. Subject to the conditions stated below, the permittee, the Port of San Francisco, is hereby authorized to do the following:

Location:

Within the Bay, at the Port of San Francisco's approaches, channels, and berthing areas at Piers 9S and N, Pier 15/17 Face, Fisherman's Wharf, Hyde Street Harbor, Piers 45E, 43/41, 39E and W, 35E and W, 31/33, 29, 27, Downtown Ferry Terminal, Pier 28E to 30/32, China Basin, South Beach Yacht Harbor, Piers 36/38N, 38S/40, 48/50N, 50S, 50 Face, 52 Basin, 54N and S, Central Basin, Piers 80, 90, 91, Islais Creek Channel, and Piers 94/96, in the City of San Francisco and County of San Francisco, and at the Alcatraz (SF-11) disposal site, and the San Pablo Bay (SF-10) disposal site (see Exhibits A through U).

Description:

(1) Maintenance dredge up to 4.4 million cubic yards (mcy) of material over ten years from the Port of San Francisco berths to project depths ranging from -12 feet to -42 feet Mean Lower Low Water (MLLW) plus 2 feet of authorized overdredge allowance - in all areas, as shown in Exhibits A through U. The approximate volumes authorized for removal from each berth area over ten years are shown in Exhibit A, entitled *Table 5-1: Potential Dredging Areas and Estimated Dredging Volumes for the Port of San Francisco*. The Port may dispose of maintenance material at the Alcatraz (SF-11) disposal site, at the San Pablo Bay (SF-10) disposal site, the San Francisco Deep Ocean Disposal Site (SF-DODS), at an authorized upland location, or a location outside the Commission's jurisdiction; and

(2) Knock down, in no more than 26 discrete episodes in any authorized areas as needed, a total of 52,000 cubic yards of material over ten years, with each knockdown event redistributing no more than 2,000 cubic yards (cy) within the berth areas (Amendment No. Two).

B. This authority is generally pursuant to and limited by your application received on December 26, 2002, and your letters received by the Commission staff on January 9, 2006, and February 23, 2009, and May 20, 2011, requesting Amendment Nos. One, and Two, and Three, respectively, including all accompanying exhibits, subsequent submissions, and all conditions of this permit (Amendment No. Three Two).

State of California • SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION • Edmund G. Brown Jr., Governor 50 California Street, Suite 2600 • San Francisco, California 94111 • (415) 352-3600 • Fax: (415) 352-3606 • info@bcdc.ca.gov • www.bcdc.ca.gov

C. Work authorized herein must commence prior to December 1, 2010 or this amended permit will lapse and become null and void. Such work must also be diligently pursued to completion and must be completed within ten years of commencement, or by October 29, 2019, whichever is earlier, unless an extension of time is granted by further amendment of this amended permit (Amendment No. <u>ThreeTwo</u>).

II. Special Conditions

The authorization made herein shall be subject to the following special conditions, in addition to the standard conditions in Part IV:

A. Water Quality Approval. At least 45 days prior to the commencement of any dredging episode authorized herein, the permittee shall submit to the Executive Director water quality certification, waste discharge requirements, or any other required approvals from the California Regional Water Quality Control Board, San Francisco Bay Region. Failure to obtain such certification prior to the commencement of any dredging episode shall terminate the Commission's authorization for that episode. The Executive Director may, upon review of the Regional Board approval, either: (1) approve the dredging episode consistent with this authorization; or (2) amend this authorization, as necessary, related to water quality issues. Unless the permittee agrees to amend this authorization in a manner specified by or on behalf of the Commission, this permit shall become null and void.

B. **Ten-Year Permit for Dredging**. The approximately 4.4 mcy or less of maintenance dredging, and 52,000 cy or less of knockdown material authorized shall be completed within ten years of the date of issuance of this permit. <u>Amendment No. Three increased the dredging volume to 298,000 cy at Pier 27, but did not increase the over volume authorized by the project.</u> No further dredging or knockdowns are authorized (Amendment No. Two).

C. Limits on Dredging. This <u>amended</u> permit authorizes maintenance and knockdown dredging only within area(s) as shown on Exhibits B through U to authorized depths <u>and</u> <u>volumes described in Exhibit A MLLW</u> plus two feet overdredge depth allowance (Amendment No. <u>Three Two</u>), as shown in Exhibit A. <u>Amendment No. Three included replacing Exhibit A</u> and Exhibit M with updated exhibits to reflect an increase in dredging volume and an <u>expansion to the dredging footprint at Pier 27 (Amendment No. Three)</u>. No dredging in other areas is authorized.

D. Dredging and Disposal Activity

- 1. **Pre- Dredging and Disposal Report and Notice.** At least 45 days before the commencement of any dredging and disposal episode authorized herein, the permittee shall submit to the Commission's Executive Director:
 - a. a bathymetric map showing the location of all areas authorized to be dredged, the authorized depth including over_dredge depth based on MLLW, the volume of material proposed to be dredged, and the approximate date of project commencement. At least two (2) weeks prior to the scheduled date of commencement of any dredging episode, the permittee shall notify the Commission staff by telephone or in writing or, if the date of commencement changes, provide an updated schedule.

b. a written statement to the Executive Director that contains: (1) the proposed disposal site and quantity of material to be disposed, and dates within which the disposal episode is proposed; (2) if applicable, a discussion as to how the volume proposed for disposal is consistent with in-Bay disposal allocations and disposal site limits; (3) the results of chemical and biological testing of sediment proposed for disposal; and (4) an alternatives analysis to explain why ocean disposal, upland disposal or beneficial reuse of dredged material is infeasible. Having a current integrated alternatives analysis on file at the Commission's office satisfies Special Condition D(1)(b)(4) (Amendment No. Two).

2. Authorization of Disposal. The authorization for the proposed in-Bay disposal shall become effective only if the Executive Director: (1) informs the permittee in writing that the episode is consistent with the authorization provided herein, alternative disposal and beneficial reuse options are infeasible, the volume proposed for disposal is consistent with both in-Bay disposal allocations, if applicable, and the disposal site limits, and the material is suitable for in-Bay disposal; or (2) does not respond to the permittee's pre-disposal report within 30 days of its receipt. If the Executive Director determines that: (1) ocean disposal, upland disposal, or beneficial reuse of the material is feasible; (2) the material proposed for disposal is unsuitable for the Bay; or (3) the proposed disposal is inconsistent with in-Bay allocations and disposal site limits, the Commission's episode authorization for in-Bay disposal shall be terminated.

3. Post-Dredging Requirements

- a. Within (30) days of completion of each dredging episode authorized by this permit, the permittee shall submit to the Commission a bathymetric map showing the actual area(s) and depths dredged including over_dredge depth based on MLLW, any dredging that occurred outside the area or below the depths authorized herein, and a written statement indicating the total volume of material dredged from each pier and disposed and the disposal location.
- b. If a dredging episode stops for longer than six consecutive months, the permittee must submit, before the dredging episode has resumed, notification to the Commission that dredging will begin again. The permittee is advised that commencement of dredging after longer than six months from the stop date may trigger (1) new sediment characterization, (2) a survey of the dredge area, and/or (3) alternative disposal option analysis.
- c. If the dredging episode continues longer than one year, whether dredging is continual throughout the year or is fragmented within the episode, the permittee must provide the Commission with the following dredging report: (1) the actual areas and the depth dredged based on MLLW, and any dredging that occurred outside the approved area and depths; (2) the actual volume of the material dredged; and (3) the volume and location of the material disposed. The dredging report must be submitted no later than one year after the commencement of the episode, and must be submitted every six months thereafter throughout the life of the permit or until the episode is complete. The permittee is advised additional sediment characterization, bathymetric surveys, and/ or alternative

disposal analyses may be required at this time. Within 30 days of the completion of the episode, the permittee must submit a dredging report as described in Special Condition D(3)(a) (Amendment No. Two).

E. Knockdown Dredging. Knockdown dredging, or underwater grading of shoals, is an activity proposed by the Port of San Francisco (Port) to remedy high spots within a berth without the mobilization of a full dredging and disposal episode. The knockdown episodes proposed in this permit must meet the following conditions; (1) the shoal must be located within the maintenance dredging footprint for the berth; (2) the depression into which the shoal will be knocked must be located within the maintenance dredging footprint of the berth; (3) each shoal to be knocked down must be no greater than 2,000 cubic yards; (4) the Port must use either a clamshell dredge or a towed I-beam to knock down the shoal into the depression (Amendment No. Two); (5) each knockdown episode must be conducted to minimize the resuspension of sediment; (6) the knockdown material must meet any chemical and biological criteria specified by BCDC and/or the Regional Water Board before being knocked down; and (7) the Port must meet the knockdown dredging episode notification requirements in Special Condition F (below).

F. Knockdown Dredging Episode Notification

- 1. **Prior Notice of Knockdown Episode.** The permittee shall notify the staff by telephone or in writing at least 14 days prior to undertaking any knockdown dredging episode (Amendment No. Two). At this time, the permittee must also confer with BCDC and the Regional Water Board as to whether any testing for this knockdown material is required, and must submit a description of the project and a pre-dredge hydrosurvey of the knockdown area. The permittee shall permit the Commission staff or representatives of other state or federal agencies to come aboard the dredge or barge associated with the knockdown dredging episode and observe the operation to ensure that the knockdown dredging activity is consistent with the dredging report required herein and the other terms and conditions of this permit.
- 2. **Approval of Knockdown Episode.** Approval (by letter or email) from the Commission's staff authorizing each individual knockdown episode will be required before a knockdown episode may commence. Please be advised that consultation and subsequent approval may be required from appropriate resource agencies before a knockdown episode may commence if the knockdown episode falls within a Long Term Management Strategy (LTMS) restricted period for the area.
- 3. Knockdown Dredging Report. Within thirty (30) days of completion of each knockdown dredging episode authorized by this permit, the permittee shall submit to the Commission a report which contains: (1) a post-dredge hydrosurvey showing (a) the location of all areas authorized to be knocked down and the authorized depth based on Mean Lower Low Water (MLLW); and (b) the actual areas, and the depth after completion of the knockdown episode based on MLLW, and any knockdown activity that occurred outside the area authorized to be knocked-down or below the authorized depths; and (2) the actual volume of the material relocated in the knockdown episode.

G. Seasonal Limitations. Except as provided below, all dredging and disposal activities shall be confined to the work window, between June 1st and November 30th of any year, to minimize disturbance to the following special status species:

Species of Concern	Work Window	Agency
Pacific Herring	March 1 st -November 30 th	CDFG
Steelhead Trout	June 1 st -November 30 th	NOAA, CDFG
Chinook Salmon	June 1 st -November 30 th	NOAA

This work window between June 1st and November 30th is consistent with the Tables F-1 and F-2 of Appendix F, "In-Bay Disposal and Dredging" to the LTMS Management Plan (2001) as amended by U.S. Fish and Wildlife Service (FWS) on May 28, 2004 (Amendment No. Two). No work inconsistent with the time and location limits contained in these tables may be conducted without the approval of the Executive Director, provided that such approval may only be issued (1) after consultation between the US Army Corps of Engineers and NOAA Fisheries has occurred and (2) the Executive Director has determined that dredging and disposal outside of the work window will be consistent with the Commission's laws and policies.

To protect the herring fishery, no dredging shall occur between December 1st and March 1st of any year unless the Port of San Francisco consults with the California Department of Fish and Game (Amendment No. Two). No work inconsistent with the herring work window may be conducted without the approval of the Executive Director, provided that such approval may only be issued (1) after consultation between the Port of San Francisco and the Department of Fish and Game has occurred; (2) the results of the consultation have been provided to Commission staff; and (3) the Executive Director has determined that dredging and disposal outside of the work window will be consistent with the Commission's laws and policies (Amendment No. Two).

H. Longfin Smelt. If, at any time during the life of this permit, any new laws, policies or regulations require measures to protect longfin smelt from potential adverse impacts of dredging, dredged material disposal, and/or beneficial reuse of dredged material, this permit shall become null and void unless the permittee agrees to amend this authorization to comply with the new laws, policies, or regulations in a manner specified by or on behalf of the Commission. For example, if CDFG requires an incidental take permit under the California Endangered Species Act, the permittee must obtain the CDFG take permit, provide the take permit to the Commission and amend the Commission's permit or the Commission's permit will become null and void (Amendment No. Two).

Barge Overflow Sampling and Testing. Results of any effluent water quality or other I. testing required by the California Regional Water Quality Control Board, San Francisco Bay Region shall be submitted in writing to Commission staff at the same time such testing is submitted to the Regional Board.

J. Monitoring and Enforcement. The permittee shall allow the Commission staff or representatives of other state or federal agencies to come aboard the dredge or barge associated with any dredging, disposal, or knockdown episode and observe the operation(s) to ensure that these activities are consistent with pre-dredging reports required herein and other terms and conditions of this permit. Further, the Commission reserves the right to have post-dredging or post-knockdown reports inspected by a reliable third party familiar with bathymetric mapping in order to verify the contents of these reports. If the Commission staff or a third party selected by or on behalf of the Commission indicates that a post-dredging or post-knockdown report is inaccurate, the Commission reserves the right to require the permittee to submit a revised report that meets the conditions of this permit. If the Commission determines that the post-dredging or post-knockdown report indicates that work has occurred beyond that authorized by this permit such violation may result in the initiation of enforcement action by or on behalf of the Commission K has occurred beyond that authorized by this permit such violation may result in the initiation of enforcement action by or on behalf of the Commission (Amendment No. One).

K. Long-Term Management Strategy Program. If, at any time during the effective life of this permit, the Commission's laws, Bay Plan policies, or regulations are changed and are in effect regarding dredging, dredged material disposal, and beneficial reuse, pursuant to the findings and policies developed through the multi-agency LTMS Management Program, this permit shall become null and void unless the permittee agrees to amend this authorization to meet the new laws, policies, or regulations in a manner specified by or on behalf of the Commission (Amendment No. One).

III. Findings and Declarations

On behalf of the Commission, I find and declare that:

A. The project authorized by this <u>amended</u> permit involves maintenance dredging of approximately 4.4 mcy of material from the Port of San Francisco berths, and disposal of the material at the federally-designated Alcatraz (SF-11) disposal site and San Pablo Bay (SF-10) disposal site, a project defined in Regulation Sections 10602(a) and 10602(e) as maintenance dredging completed within a period of ten years with disposal at an approved in-bay disposal site, with annual target volumes consistent with Regulation Sections 10713.5 and 10721(a) through 10721(e), at the San Francisco Deep Ocean Disposal Site (SF-DODS), and/or at a nonaquatic location, and thus is a "minor repair or improvement" for which the Executive Director may issue a permit or amendment, consistent with Regulation Section 10622(a) and 10810(b), and pursuant to Government Code Section 66632(f). Additional dredging episodes may be authorized by amendment or by granted time extension of the original permit (Amendment No. Three Two).

This permit also authorizes 26 knockdown dredging events of a total of 52,000 cy over a period of ten years. Knockdown events are activities similar to maintenance dredging, as they will redistribute or smooth out mounded sediment within a berth area. The knockdown activities will be executed in a manner consistent with Special Conditions II-E and II-F, thus minimizing negative impacts to the environment. Knockdown dredging is an activity similar to maintenance dredging, and thus is a "minor repair or improvement" for which the Executive Director may issue a permit, pursuant to Government Code Section 66632(f) and Regulation Section 10602 (Amendment No. Two).

Permit History. The original permit authorized approximately 2.2 mcy of maintenance В. dredging over five years in areas shown in Exhibits B through U, with disposal at the state and federally authorized Alcatraz or the San Francisco Deep Ocean disposal site, or at an authorized upland location. The original permit also authorized and 13 knockdown dredging events of a total of 26,000 cy over five years in the berth areas. Amendment No. One expanded the area proposed for maintenance dredging in Berth 27 to allow cruise ships to berth there on an interim basis while the cruise ship terminal was under development. In addition, Amendment No. One authorized an additional 40,000 cy of dredging and disposal to accommodate this larger berth footprint (Amendment No. One). Work authorized by the original permit and Amendment No. One was to be completed by October 29, 2009. Amendment No. Two authorizes 4.4 mcy of maintenance dredging over ten years in areas shown in Exhibits C through V, to be completed by December 1, 2019. <u>Amendment No. Three increased the</u> maintenance dredging volume at Pier 27 to 298,000 cy from 240,000 cy and expanded the dredging footprint. As part of Amendment No. Three, Exhibit A and Exhibit M were updated to reflect the new volume and footprint (Amendment No. Three Two).

C. The project authorized by this <u>amended</u> permit is consistent with the McAteer-Petris Act and with the San Francisco Bay Plan in that it will not adversely affect the Bay nor public access to and enjoyment of the Bay. The Special Conditions have been included to ensure that the project minimizes potential adverse impact to native, endangered, and/or special status species, and Bay water quality. Regarding the state-listed longfin smelt, the permittee, as directed by CDFG, has determined that longfin smelt will not be taken as part of this project. ("Take" under the California Endangered Species Act means to "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture, or kill.") Commission staff has requested the concurrence or objection to this determination. CDFG has not responded to the Commission staff request (Amendment No. Two). The project also adheres to the Bay Plan's dredging policies in that dredged material disposal will not cause further sedimentation or harmful effects to the ecology of the Bay. <u>The expanded dredging footprint authorized by Amendment No. Three has been</u> <u>dredged by the Port in the past, and thus is considered maintenance dredging.</u>

D. The Commission further finds, declares, and certifies that the activity or activities authorized herein are consistent with the Commission's Amended Management Program for San Francisco Bay, as approved by the Department of Commerce under the Federal Coastal Zone Management Act of 1972, as amended.

E. Pursuant to Article 19, Section 15304(g) of the California Environmental Quality Act (CEQA) and Regulation Section 11501, the project authorized by this permit is categorically exempt from the requirement to prepare an environmental impact report unless the project will result in take of a listed species that is not covered by the LTMS Policy Environmental Impact Statement/Programmatic Environmental Impact Report and will require a take permit. If a take permit is required, additional CEQA documentation will be required (Amendment No. Two).

F. Pursuant to Regulation Section 10620, the original project was listed with the Commission on September 18, 2003.

IV. Standard Conditions

A. **Permit Execution**. This amended permit shall not take effect unless the permittee executes the original of this amended permit and returns it to the Commission within ten days after the date of the issuance of the amended permit. No work shall be done until the acknowledgment is duly executed and returned to the Commission.

B. **Notice of Completion**. The attached Notice of Completion and Declaration of Compliance form shall be returned to the Commission within 30 days following completion of the work.

C. **Permit Assignment**. The rights, duties, and obligations contained in this amended permit are assignable. When the permittee transfers any interest in any property either on which the activity is authorized to occur or which is necessary to achieve full compliance of one or more conditions to this amended permit, the permittee/transferor and the transferee shall execute and submit to the Commission a permit assignment form acceptable to the Executive Director. An assignment shall not be effective until the assignee executes and the Executive Director receives an acknowledgment that the assignee has read and understands the amended permit and agrees to be bound by the terms and conditions of the amended permit, and the assignee is accepted by the Executive Director as being reasonably capable of complying with the terms and conditions of the amended permit.

D. **Permit Runs With the Land**. Unless otherwise provided in this amended permit, the terms and conditions of this amended permit shall bind all future owners and future possessors of any legal interest in the land and shall run with the land.

E. **Other Government Approvals**. All required permissions from governmental bodies must be obtained before the commencement of work; these bodies include, but are not limited to, the U. S. Army Corps of Engineers, the State Lands Commission, the Regional Water Quality Control Board, and the city or county in which the work is to be performed, whenever any of these may be required. This amended permit does not relieve the permittee of any obligations imposed by State or Federal law, either statutory or otherwise.

F. Built Project must be Consistent with Application. Work must be performed in the precise manner and at the precise locations indicated in your application, as such may have been modified by the terms of the amended permit and any plans approved in writing by or on behalf of the Commission.

G. Life of Authorization. Unless otherwise provided in this amended permit, all the terms and conditions of this amended permit shall remain effective for so long as the amended permit remains in effect or for so long as any use or construction authorized by this amended permit exists, whichever is longer.

H. **Commission Jurisdiction**. Any area subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission under either the McAteer-Petris Act or the Suisun Marsh Preservation Act at the time the amended permit is granted or thereafter shall remain subject to that jurisdiction notwithstanding the placement of any fill or the implementation of any substantial change in use authorized by this amended permit. Any area not subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission that becomes, as a result of any work or project authorized in this amended permit, subject to tidal action shall become subject to the Commission's "bay" jurisdiction.

I. Changes to the Commission's Jurisdiction as a Result of Natural Processes. This amended permit reflects the location of the shoreline of San Francisco Bay when the permit was issued. Over time, erosion, avulsion, accretion, subsidence, relative sea level change, and other factors may change the location of the shoreline, which may, in turn, change the extent of the Commission's regulatory jurisdiction. Therefore, the issuance of this amended permit does not guarantee that the Commission's jurisdiction will not change in the future.

J. Violation of Permit May Lead to Permit Revocation. Except as otherwise noted, violation of any of the terms of this amended permit shall be grounds for revocation. The Commission may revoke any amended permit for such violation after a public hearing held on reasonable notice to the permittee or its assignee if the amended permit has been effectively assigned. If the amended permit is revoked, the Commission may determine, if it deems appropriate, that all or part of any fill or structure placed pursuant to this amended permit shall be removed by the permittee or its assignee if the amended permit has been assigned.

K. Should Permit Conditions Be Found to be <u>illegal or Unenforceable</u>. Unless the Commission directs otherwise, this amended permit shall become null and void if any term, standard condition, or special condition of this amended permit shall be found illegal or unenforceable through the application of statute, administrative ruling, or court determination. If this amended permit becomes null and void, any fill or structures placed in reliance on this amended permit shall be subject to removal by the permittee or its assignee if the amended permit has been assigned to the extent that the Commission determines that such removal is appropriate. Any uses authorized shall be terminated to the extent that the Commission determines that such uses should be terminated.

Executed at San Francisco, California, on behalf of the San Francisco Bay Conservation and Development Commission on the date first above written.

WILL TRAVIS Executive Director San Francisco Bay Conservation and Development Commission

WT/CB/rca

cc: Rob Lawrence, U.S. Army Corps of Engineers Jason Brush, U.S. Environmental Protection Agency Beth Christian, S.F. Bay Regional Water Quality Control Board Donn Oetzel, State Lands Commission Vicki Frey, California Department of Fish and Game Gary Stern, NOAA Fisheries Ryan Olah, U.S. Fish and Wildlife Service San Francisco County Planning Department Christine Boudreau, Boudreau Associates, LLC

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION IX 75 Hawthorne Street San Francisco, CA 94105

EPA Standard Ocean Disposal Conditions for the San Francisco Deep Ocean Disposal Site (SF-DODS)

(April 9, 2013 Update)

For enhanced clarity and understanding, the following updated Special Conditions combine and renumber many of the previously-published special conditions for SF-DODS. Note that the substantive provisions of EPA's 1999 rule (64 FR 141, pages 39927-39934), and EPA's most recent SMMP Implementation Manual for SF-DODS must be incorporated by reference as part of the project authorization/contract, except as the following specific provisions update them. Also note that the terms "permit" and "permittee" as used here apply to USACE ocean dumping permits issued to others under Section 103 of the MPRSA, and to USACE itself and its contracts or other authorizations for USACE dredging projects.

Mandatory Conditions for use of the San Francisco Deep Ocean Disposal Site (SF-DODS)

- 1. Dredged material shall not be leaked or spilled from disposal vessels during transit to the SF-DODS. Transportation of dredged material to the SF-DODS shall only be allowed when weather and sea state conditions will not interfere with safe transportation and will not create risk of spillage, leak or other loss of dredged material in transit to the SF-DODS. No disposal vessel trips shall be initiated when the National Weather Service has issued a gale warning for local waters during the time period necessary to complete dumping operations, or when wave heights are 16 feet or greater.
- 2. Vessels used for dredged material transportation and disposal must not be loaded beyond a level at which dredged material would be expected to be spilled in transit under anticipated sea state conditions, and in no case may disposal vessels be filled to more than 80 percent of the vessel's maximum bin or hopper volume. Before any disposal vessel departs for the SF-DODS, an independent quality control inspector ("*Independent*" means not a direct employee of the permittee or dredging contractor) must certify in writing that the vessel is not over-loaded, and otherwise meets the conditions and requirements of a Scow Certification Checklist that containsall of the substantive elements found in the example contained in the most current SMMP Implementation Manual. EPA and USACE must approve the permittees' proposed Scow Certification Checklist prior to the commencement of ocean disposal operations. No ocean disposal trip may be initiated until both the disposal vessel captain and the independent inspector have signed all relevant entries on the Scow Certification Checklist.

3. Disposal vessels in transit to and from the SF-DODS must remain at least three nautical miles from the Farallon Islands whenever possible. Closer approaches should occur only where the designated vessel traffic lane enters the 3-mile limit. In no case should disposal vessels leave the designated vessel traffic lane within the 3-mile limit, or transit north of a line extending westward from the termination of the designated vessel traffic lane while within the 3-mile limit.

- 4. Surface Disposal Zone (SDZ): When dredged material is discharged within the SF-DODS, no portion of the vessel from which the materials are to be released (e.g. hopper dredge or towed barge) may be further than 1,960 feet (600 meters) from the center of the disposal site at latitude 37°39'N; longitude 123°29'W.
- 5. No more than one disposal vessel may be present within the SF-DODS SDZ at any time.
- 6. The primary tracking system for recording ocean disposal operations shall be disposal vessel-(e.g., scow-) based. Disposal vessels shall use an appropriate Global Positioning System (satellite) tracking system capable of indicating and recording the position of the disposal vessel with a minimum accuracy of 10 feet during all transportation and disposal operations. Sensors for vessel draft and bin height must be positioned near both the forward and aft ends of the disposal vessel, as near as practicable to the vessel's center line, and calibrated to accurately record vessel draft and load level within the bin, respectively. The primary disposal tracking system must indicate and record the position, draft, and load level within the bin of the disposal vessel throughout transit to the disposal site, during dumping and for at least one-half hour after disposal is complete, as well as indicate and record the time and location of the beginning and end of each disposal event. This primary disposal tracking system must indicate and automatically record the position, draft and load level within the bin of the disposal vessel at a maximum 5-minute interval while outside the SF-DODS disposal site boundary, and at a maximum 15-second interval while inside the SF-DODS disposal site boundary.
- 7. Data recorded from the primary disposal tracking system must be posted by a third party contractor on a near-real time basis to a World Wide Web (Internet) site accessible by EPA Region 9, the San Francisco District USACE, and NOAA's Gulf of the Farallones National Marine Sanctuary. The Web site must be searchable by disposal trip number and date, and at a minimum for each disposal trip it must provide a visual display of: the disposal vessel transit route to SF-DODS; the beginning and ending locations of the disposal event; and the disposal vessel draft and load level in the bin throughout the transit. The requirement for posting this information on the Web is independent from the hard-copy reporting requirements listed in Special Condition 9, below. The third-party system must also generate and distribute "e-mail alerts" regarding any degree of apparent dumping outside the Surface Disposal Zone of SF-DODS, and regarding any apparent substantial leakage/spillage or other loss of material en route to SF-DODS. Substantial leakage/spillage or other loss shall be defined as an apparent loss of draft of one foot or more between the time that the disposal vessel begins the trip to SF-DODS and the time of actual disposal. E-mail alerts for any disposal trip must be sent within 24 hours of the end of that trip to EPA Region 9, the San Francisco District USACE, the relevant National Marine Sanctuary if the event triggering the alert occurred within a Sanctuary boundary, and to other addressees as may be indicated by EPA or USACE on a project-specific basis.
- 8. A functioning back-up navigation system, meeting the minimum accuracy requirement listed above, must also be in place on the towing vessel (tug, if any). If the primary (disposal vessel's) navigation tracking system fails during transit, the disposal trip may continue only so long as the back-up (towing vessel's) navigation and tracking system remains operational, by placing the towing vessel in such a location that, given the compass heading and tow cable length to the scow ("lay back"), the estimated scow position would be within the surface disposal zone [i.e., within 1,960 feet (600 meters) of the center of the disposal site]. In such cases the towing vessel's position, and the tow cable length and compass heading to the disposal vessel, must be recorded and reported. Further disposal operations using a disposal vessel whose navigation tracking system fails must cease until those primary capabilities are restored.

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- 9. In addition to the requirement in Special Condition 7, above, for posting data on the Web, the permittee shall maintain daily records (using the approved Scow Certification Checklist) of: the amount of material dredged and loaded into barges for disposal; the location from which the material in each barge was dredged; the weather report for and sea-state conditions anticipated during the transit period; the time that each disposal vessel departs for, arrives at and returns from the SF-DODS; the exact location and time of each disposal; and the volume of material disposed at the SF-DODS during each disposal trip. The permittee shall also maintain, for each ocean disposal trip, both electronic data and printouts from the GPS-based primary disposal tracking system (or the backup navigation tracking system when appropriate) showing transit routes. disposal vessel draft readings, disposal coordinates, and the time and position of the disposal vessel when dumping was commenced and completed. These daily records shall be compiled at a minimum for each month during which ocean disposal operations occur, and provided in reports, certified accurate by the independent quality control inspector, to both EPA and USACE. For each ocean disposal trip, these reports shall include the electronic tracking and disposal vessel draft data on CD-ROM (or other media approved by EPA and USACE), as well as hard copy reproductions of the Scow Certification Checklists and printouts listed above. The monthly reports shall include a cover letter describing any problems complying with the Ocean Disposal Special Conditions, the cause(s) of the problems, any steps taken to rectify the problems, and whether the problems occurred on subsequent disposal trips.
- 10. An independent quality control inspector ("*Independent*" means not a direct employee of the permittee or dredging contractor) shall observe all dredging operations, and inspect each disposal vessel prior to its departure for SF-DODS. The inspector shall certify (along with the disposal vessel captain) whether the specifications on the approved Scow Certification Checklist have been met. The inspector shall promptly inform the permittee whether there are any inaccuracies or discrepancies concerning this information, and if so shall provide a summary of such in the permittee's report to EPA and USACE for the relevant month.
- 11. The permittee shall report any anticipated, potential, or actual variances from compliance with these Ocean Disposal Special Conditions, and any additional project-specific Special Conditions, to the District Engineer and the Regional Administrator within 24 hours of discovering such a situation. If any of these compliance problems occur within the boundaries of a National Marine Sanctuary, the permittee must also report any such situation to the relevant Sanctuary office within 24 hours. An operational "e-mail alert" system, as described in Special Condition 7 above, will be considered as fulfilling this 24-hour notification requirement. In addition, the permittee shall prepare and submit a detailed report of any such compliance problems, certified accurate by the independent quality control inspector, on a weekly basis by noon Monday, to the District Engineer and the Regional Administrator. These reports shall describe the cause(s) of the problems, any steps taken to rectify the problems, and whether the problems occurred on subsequent disposal trips
- 12. Within 60 days following the completion of ocean disposal operations, the permittee shall submit to the District Engineer and Regional Administrator a completion letter summarizing the total number of disposal trips and the overall (bin and in-situ) volume of material disposed at SF-DODS for the project, and whether any of this dredged material was excavated from outside the areas authorized for ocean disposal or was dredged deeper than authorized by the permit.

455 Golden Gate Avenue, Suite 10600, San Francisco, California 94102 tel 415 352 3600 fax 415 352 3606

Exhibit E

July 14, 2016

Ms. Shannon Alford Port of San Francisco Pier 1 San Francisco, California 94111

SUBJECT: Amendment No. Five to BCDC Permit No. M2002.071.00

Dear Ms. Alford:

Enclosed please find an original of BCDC Permit No. M2002.071.00, Amendment No. Five, stamped "BCDC Original," and one copy, stamped "Permittees' Copy," both executed by the Executive Director, incorporating the amendment requested in your application dated June 27, 2016. In the amended permit, deleted language has been struck through and added language has been underlined.

I am issuing this amendment, which is attached, on behalf of the Commission and upon the following findings and declarations:

- This amendment to the permit is issued pursuant to Regulation Section 10810 upon the same criteria provided for the issuance of administrative permits in that the project authorized by this amendment is a "minor repair or improvement" for which the Executive Director may issue a permit, pursuant to Government Code Section 66632(f) and Regulation Section 10622(a).
- 2. The amendment to the permit is consistent with the San Francisco Bay Plan and the McAteer-Petris Act because the proposed project will not adversely affect the Bay nor public access to and enjoyment of the Bay consistent with the project.

You must (1) **complete** the acknowledgment section of the amended permit stamped "BCDC Original," which indicates that you have read and that you understand all of the terms and conditions of the amended permit; and (2) **return** that entire executed "BCDC Original" to the Commission's office within the ten-day time period. You should retain the copy stamped "Permittees' Copy" for your records along with a copy of the Notice of Completion and Declaration of Compliance form, which you must sign and return to the Commission upon project completion.



Ms. Shannon Alford July 14, 2016 Page 2

Furthermore, your permit contains special conditions, which require you to take certain specific actions. Please read Special Condition II-D carefully, particularly section D-3 regarding reporting requirements and Special Condition II-G as regulating documents have been updated. Please understand that **no** work may commence on the project until the permit stamped "BCDC Original" is executed and returned to us. Until the Commission receives the executed permit, the Port of San Francisco does not have the necessary authorization for the work authorized under the permit. The commencement of any work within the Commission's jurisdiction without the necessary authorization from the Commission is a violation of the McAteer-Petris Act and could subject you to substantial fines.

If you should have any questions concerning the permit or the procedure outlined above, please feel free to contact Pascale Soumoy of our staff at (415) 352-3669 or via email at Pascale.soumoy@bcdc.ca.gov.

Sincerély LAWRENCE J. GOĽDZBAND

EXERCIE J. GOLDZBAND Executive Director San Francisco Bay Conservation and Development Commission

Enc.

LG/PS/gg

cc: Christine Boudreau, Boudreau Associates LLC Mark D'Avignon, U.S. Army Corps of Engineers Jason Brush, U.S. Environmental Protection Agency Beth Christian, S.F. Bay Regional Water Quality Control Board Al Franzoia, State Lands Commission Arn Aarrberg, California Department of Fish and Wildlife Gary Stern, NOAA Fisheries Ryan Olah, U.S. Fish and Wildlife Service San Francisco County Planning Department

San Francisco Bay Conservation and Development Commission

455 Golden Gate Avenue, Suite 10600, San Francisco, California 94102 tel 415 352 3600 fax 415 352 3606

PERMIT NO. M2002.071.00 (Issued on September 19, 2003, As Amended Through July 14 2016) AMENDMENT NO. FIVE

PORT OF SAN FRANCISCO

NOTICE OF COMPLETION AND DECLARATION OF COMPLIANCE

San Francisco Bay Conservation and Development Commission 455 Golden Gate Avenue, Suite 10600 San Francisco, CA 94102

Ladies and Gentlemen:

You are hereby informed that the work authorized by the above-referenced amended permit was completed on ______.

I have personally reviewed the terms and conditions of the amended permit, the final plans approved by or on behalf of the Commission, and the completed project and hereby certify that the project is in compliance with all terms and conditions of the amended permit and conforms to the plans previously reviewed and approved by or on behalf of the Commission. I further certify that all conditions of the amended permit, particularly with regard to plan review, public access areas and improvements, recordation, open space restrictions and other special conditions have been met.

I, ______, hereby declare under penalty of perjury that the foregoing is true and correct and that if called upon to testify to the contents of this notice, I would so testify.

Executed on this	day of	, 20,
		, California.

at

(Permittee)

Title

PERMIT NO. M2002.071.00 (Issued on September 19, 2003, As Amended Through July 14 2016) AMENDMENT NO. FIVE

Port of San Francisco Pier 1 San Francisco, California 94111

ATTENTION: Ms. Shannon Alford

Dear Ms. Alford:

I. Authorization

A. Subject to the conditions stated below, the permittee, the Port of San Francisco, is hereby authorized to do the following:

- Location: Within the Bay, at the Port of San Francisco's approaches, channels, and berthing areas at Piers 9S and N, Pier 15/17 Face, Fisherman's Wharf, Hyde Street Harbor, Piers 45E, 43/41, 39E and W, 35E and W, 31/33, 29, 27, Downtown Ferry Terminal, Pier 28E to 30/32, China Basin, South Beach Yacht Harbor, Piers 36/38N, 38S/40, 48/50N, 50S, 50 Face, 52 Basin, 54N and S, Central Basin, Piers 80, 90, 91, Islais Creek Channel, and Piers 94/96, in the City of San Francisco and County of San Francisco, and at the Alcatraz (SF-11) disposal site, and the San Pablo Bay (SF-10) disposal site (see Exhibits A through U).
- Description: (1) Maintenance dredge up to 4.41 million cubic yards (mcy) of material over ten years from the Port of San Francisco berths to project depths ranging from -12 feet to -42 feet Mean Lower Low Water (MLLW) plus 2 feet of authorized overdredge allowance in all areas, as shown in Exhibits A through U. The approximate volumes authorized for removal from each berth area over ten years are shown in Exhibit A, entitled *Table 5-1: Potential Dredging Areas and Estimated Dredging Volumes for the Port of San Francisco*. The Port may dispose of maintenance dredged material at the Alcatraz (SF-11) disposal site, at the San Pablo Bay (SF-10) disposal site, the San Francisco Deep Ocean Disposal Site (SF-DODS), at an authorized upland location, or a location outside the Commission's jurisdiction; and
 - (2) Knock down, in no more than 26 discrete episodes in any authorized area as needed, a total of 52,000 cubic yards of material over ten years, with each knockdown event redistributing no more than 2,000 cubic yards (cy) within the berth areas (Amendment No. Two).



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B. This authority is generally pursuant to and limited by your application received on December 26, 2002, and your letters received by the Commission staff on January 9, 2006, February 23, 2009, May 20, 2011, and July 30, 2014, and June 27, 2016, requesting Amendment Nos. One, Two, Three, and Four, and Five, respectively, including all accompanying exhibits, subsequent submissions, and all conditions of this permit (Amendment No. Five Four).

C. Work authorized herein must commence prior to October 15, 2014 or this amended permit will lapse and become null and void. Such work must also be diligently pursued to completion and must be completed by October 29, 2019, whichever is earlier, unless an extension of time is granted by further amendment of this amended permit (Amendment No. Four).

II. Special Conditions

The authorization made herein shall be subject to the following special conditions, in addition to the standard conditions in Part IV:

A. Water Quality Approval. At least 45 days prior to the commencement of any dredging episode authorized herein, the permittee shall submit to the Executive Director water quality certification, waste discharge requirements, or any other required approvals from the California Regional Water Quality Control Board, San Francisco Bay Region. Failure to obtain such certification prior to the commencement of any dredging episode shall terminate the Commission's authorization for that episode. The Executive Director may, upon review of the Regional Board approval, either: (1) approve the dredging episode consistent with this authorization; or (2) amend this authorization, as necessary, related to water quality issues. Unless the permittee agrees to amend this authorization in a manner specified by or on behalf of the Commission, this permit shall become null and void.

B. **Ten-Year Permit for Dredging**. The approximately 4.41 mcy or less of maintenance dredging and 52,000 cy or less of knockdown material authorized shall be completed by October 29, 2019 (Amendment No. Four). No further dredging or knockdowns are authorized (Amendment No. Two).

C. Limits on Dredging. This amended permit authorizes maintenance and knockdown dredging only within area(s) as shown on Exhibits B through U to authorized depths and volumes described in Exhibit A, plus two feet overdredge depth allowance (Amendment No. Four). Amendment No. Four authorizes an additional 10,000 cy of dredging volume at Pier 27, but does not change the dredging footprint or permitted dredging depths or overdepth allowance. The total permitted dredging volume increases from 4.4 mcy to 4.41 mcy. Amendment No. Five authorizes an additional 203,000 cy of maintenance dredging at Pier 27 with no changes to the dredge footprint, permitted dredging depths, overdepth allowance and total permitted dredging volume (Amendment No. Five). No dredging in other areas is authorized.

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D. Dredging and Disposal Activity

- 1. **Pre- Dredging and Disposal Report and Notice.** At least 45 days before the commencement of any dredging and disposal episode authorized herein, the permittee shall submit to the Commission's Executive Director:
 - a. a bathymetric map showing the location of all areas authorized to be dredged, the authorized depth including over-dredge depth based on MLLW, the volume of material proposed to be dredged, and the approximate date of project commencement. At least two (2) weeks prior to the scheduled date of commencement of any dredging episode, the permittee shall notify the Commission staff by telephone or in writing or, if the date of commencement changes, provide an updated schedule.
 - b. a written statement to the Executive Director that contains: (1) the proposed disposal site and quantity of material to be disposed, and dates within which the disposal episode is proposed; (2) if applicable, a discussion as to how the volume proposed for disposal is consistent with in-Bay disposal allocations and disposal site limits; (3) the results of chemical and biological testing of sediment proposed for disposal; and (4) an alternatives analysis to explain why ocean disposal, upland disposal or beneficial reuse of dredged material is infeasible. Having a current integrated alternatives analysis on file at the Commission's office satisfies Special Condition D(1)(b)(4) (Amendment No. Two).
- 2. Authorization of Disposal. The authorization for the proposed in-Bay disposal shall become effective only if the Executive Director: (1) informs the permittee in writing that the episode is consistent with the authorization provided herein, alternative disposal and beneficial reuse options are infeasible, the volume proposed for disposal is consistent with both in-Bay disposal allocations, if applicable, and the disposal site limits, and the material is suitable for in-Bay disposal; or (2) does not respond to the permittee's pre-disposal report within 30 days of its receipt. If the Executive Director determines that: (1) ocean disposal, upland disposal, or beneficial reuse of the material is feasible; (2) the material proposed for disposal is unsuitable for the Bay; or (3) the proposed disposal is inconsistent with in-Bay allocations and disposal site limits, the Commission's episode authorization for in-Bay disposal shall be terminated.

3. Post-Dredging Requirements

a. Within (30) days of completion of each dredging episode authorized by this permit, the permittee shall submit to the Commission a bathymetric map showing the actual area(s) and depths dredged including over-dredge depth based on MLLW, any dredging that occurred outside the area or below the depths authorized herein, and a written statement indicating the total volume of material dredged from each pier and disposed and the disposal location.

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b. If a dredging episode stops for longer than six consecutive months, the permittee must submit, before the dredging episode has resumed, notification to the Commission that dredging will begin again. The permittee is advised that commencement of dredging after longer than six months from the stop date may trigger (1) new sediment characterization, (2) a survey of the dredge area, and/or (3) alternative disposal option analysis.

c. If the dredging episode continues longer than one year, whether dredging is continual throughout the year or is fragmented within the episode, the permittee must provide the Commission with the following dredging report: (1) the actual areas and the depth dredged based on MLLW, and any dredging that occurred outside the approved area and depths; (2) the actual volume of the material dredged; and (3) the volume and location of the material disposed. The dredging report must be submitted no later than one year after the commencement of the episode, and must be submitted every six months thereafter throughout the life of the permit or until the episode is complete. The permittee is advised additional sediment characterization, bathymetric surveys, and/or alternative disposal analyses may be required at this time. Within 30 days of the completion of the episode, the permittee must submit a dredging report as described in Special Condition D(3)(a) (Amendment No. Two).

E. **Knockdown Dredging.** Knockdown dredging, or underwater grading of shoals, is an activity proposed by the Port of San Francisco (Port) to remedy high spots within a berth without the mobilization of a full dredging and disposal episode. The knockdown episodes proposed in this permit must meet the following conditions; (1) the shoal must be located within the maintenance dredging footprint for the berth; (2) the depression into which the shoal will be knocked must be located within the maintenance dredging footprint for the berth; (3) each shoal to be knocked down must be no greater than 2,000 cubic yards; (4) the Port must use either a clamshell dredge or a towed I-beam to knock down the shoal into the depression (Amendment No. Two); (5) each knockdown material must meet any chemical and biological criteria specified by BCDC and/or the Regional Water Board before being knocked down; and (7) the Port must meet the knockdown dredging episode notification requirements in Special Condition F (below).

F. Knockdown Dredging Episode Notification

 Prior Notice of Knockdown Episode. The permittee shall notify the staff by telephone or in writing at least 14 days prior to undertaking any knockdown dredging episode (Amendment No. Two). At this time, the permittee must also confer with BCDC and the Regional Water Board as to whether any testing for this knockdown material is required, and must submit a description of the project and a

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> pre-dredge hydrosurvey of the knockdown area. The permittee shall permit the Commission staff or representatives of other state or federal agencies to come aboard the dredge or barge associated with the knockdown dredging episode and observe the operation to ensure that the knockdown dredging activity is consistent with the dredging report required herein and the other terms and conditions of this permit.

- 2. **Approval of Knockdown Episode.** Approval (by letter or email) from the Commission's staff authorizing each individual knockdown episode will be required before a knockdown episode may commence. Please be advised that consultation and subsequent approval may be required from appropriate resource agencies before a knockdown episode may commence if the knockdown episode falls within a Long Term Management Strategy (LTMS) restricted period for the area.
- 3. **Knockdown Dredging Report.** Within thirty (30) days of completion of each knockdown dredging episode authorized by this permit, the permittee shall submit to the Commission a report which contains: (1) a post-dredge hydrosurvey showing (a) the location of all areas authorized to be knocked down and the authorized depth based on Mean Lower Low Water (MLLW); and (b) the actual areas, and the depth after completion of the knockdown episode based on MLLW, and any knockdown activity that occurred outside the area authorized to be knocked-down or below the authorized depths; and (2) the actual volume of the material relocated in the knockdown episode.

G. **Seasonal Limitations.** Except as provided below, all dredging and disposal activities shall be confined to the work window, between June 1st and November 30th of any year, to minimize disturbance to the following special status species:

Species of Concern	Work Window	Agency
Pacific Herring	March 1 st -November 30 th	CDFW
Steelhead Trout	June 1 st -November 30 th	NOAA, CDFW
Chinook Salmon	June 1 st -November 30 th	NOAA

CDFW -California Department of Fish and Wildlife, NOAA-NOAA Fisheries

This work window between June 1st and November 30th is consistent with the Tables F-1 and F-2 of Appendix F, "In-Bay Disposal and Dredging" to the LTMS Management Plan (2001) as amended by U.S. Fish and Wildlife Service (FWS) on May 28, 2004 <u>and NOAA Fisheries on July 9,</u> <u>2015</u> (Amendment No. Two <u>Five</u>). No work inconsistent with the time and location limits contained in these tables may be conducted without the approval of the Executive Director, provided that such approval may only be issued (1) after consultation between the US Army

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Corps of Engineers and NOAA Fisheries has occurred after consultation with California Department of Fish and Wildlife (CDFW) for impacts to herring and salmonids has occurred, and if applicable, a herring waiver has been received and provided to Commission staff; (2) the proposed dredging outside the salmonid work window has been discussed with the LTMS Program Managers and a beneficial reuse disposal site benefitting fish habitat has been identified; and (3) the Executive Director has determined that dredging and disposal outside of the work window will be consistent with the Commission's laws and policies (Amendment No. Five).

To protect the herring fishery, no dredging shall occur between December 1st-and March 1st-of any year unless the Port of San-Francisco consults with the California Department of Fish and Wildlife_(Amendment No. Two). No work inconsistent with the herring work window may be conducted without the approval of the Executive Director, provided that such approval may only be issued (1) after consultation between the Port of San-Francisco and the Department of Fish and Wildlife_has occurred; (2) the results of the consultation have been provided to Commission staff; and (3) the Executive Director has determined that dredging and disposal outside of the work window will be consistent with the Commission's laws and policies (Amendment No. Two).

H. Longfin Smelt. If, at any time during the life of this permit, any new laws, policies or regulations require measures to protect longfin smelt from potential adverse impacts of dredging, dredged material disposal, and/or beneficial reuse of dredged material, this permit shall become null and void unless the permittee agrees to amend this authorization to comply with the new laws, policies, or regulations in a manner specified by or on behalf of the Commission. For example, if CDFW requires an incidental take permit under the California Endangered Species Act, the permittee must obtain the CDFW take permit, provide the take permit to the Commission and amend the Commission's permit or the Commission's permit will become null and void (Amendment No. Two).

I. Barge Overflow Sampling and Testing. Results of any effluent water quality or other testing required by the California Regional Water Quality Control Board, San Francisco Bay Region shall be submitted in writing to Commission staff at the same time such testing is submitted to the Regional Board.

J. **Monitoring and Enforcement.** The permittee shall allow the Commission staff or representatives of other state or federal agencies to come aboard the dredge or barge associated with any dredging, disposal, or knockdown episode and observe the operation(s) to ensure that these activities are consistent with pre-dredging reports required herein and other terms and conditions of this permit. Further, the Commission reserves the right to have post-dredging or post-knockdown reports inspected by a reliable third party familiar with bathymetric mapping in order to verify the contents of these reports. If the Commission staff or a third party selected by or on behalf of the Commission indicates that a post-dredging or post-

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knockdown report is inaccurate, the Commission reserves the right to require the permittee to submit a revised report that meets the conditions of this permit. If the Commission determines that the post-dredging or post-knockdown report indicates that work has occurred beyond that authorized by this permit such violation may result in the initiation of enforcement action by or on behalf of the Commission (Amendment No. One).

K. Long-Term Management Strategy Program. If, at any time during the effective life of this permit, the Commission's laws, Bay Plan policies, or regulations are changed and are in effect regarding dredging, dredged material disposal, and beneficial reuse, pursuant to the findings and policies developed through the multi-agency LTMS Management Program, this permit shall become null and void unless the permittee agrees to amend this authorization to meet the new laws, policies, or regulations in a manner specified by or on behalf of the Commission (Amendment No. One).

III. Findings and Declarations

On behalf of the Commission, I find and declare that:

A. The project authorized by this amended permit involves maintenance dredging of approximately 4.41 mcy of material from the Port of San Francisco berths, and disposal of the material at the federally-designated Alcatraz (SF-11) disposal site and San Pablo Bay (SF-10) disposal site, <u>This amended permit also reallocates volume between previously authorized dredge areas and qualifies as a "minor repair or improvement" per Regulation Section 10622(a). Additionally the a project defined in is consistent with Regulation Sections 10602(a) and 10602(e) as maintenance dredging completed within a period of ten years with disposal at an approved in-bay disposal site, with annual target volumes consistent with Regulation Sections 10713.5 and 10721(a) through 10721(e), at the San Francisco Deep Ocean Disposal Site (SF-DODS), and/or at a non-aquatic location, and thus is a "minor repair or improvement" for which the Executive Director may issue a permit or amendment, consistent with Regulation Section 10622(a) and 10810(b), and pursuant to Government Code Section 66632(f). Additional dredging episodes may be authorized by amendment or by granted time extension of the original permit (Amendment No. Five Three).</u>

This permit also authorizes 26 knockdown dredging events of a total of 52,000 cy over a period of ten years. Knockdown events are activities similar to maintenance dredging, as they will redistribute or smooth out mounded sediment within a berth area. The knockdown activities will be executed in a manner consistent with Special Conditions II-E and II-F, thus minimizing negative impacts to the environment. Knockdown dredging is an activity similar to maintenance dredging, and thus is a "minor repair or improvement" for which the Executive Director may issue a permit, pursuant to Government Code Section 66632(f) and Regulation Section 10602 (Amendment No. Two).

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B. **Permit History.** The original permit authorized approximately 2.2 mcy of maintenance dredging over five years in areas shown in Exhibits B through U, with disposal at the state and federally authorized Alcatraz or the San Francisco Deep Ocean disposal site, or at an authorized upland location. The original permit also authorized and 13 knockdown dredging events of a total of 26,000 cy over five years in the berth areas. Amendment No. One expanded the area proposed for maintenance dredging in Berth at Pier 27 to allow cruise ships to berth there on an interim basis while the cruise ship terminal was under development. In addition, Amendment No. One authorized an additional 40,000 cy of dredging and disposal to accommodate this larger berth footprint (Amendment No. One). Work authorized by the original permit and Amendment No. One was to be completed by October 29, 2009. Amendment No. Two authorized 4.4 mcy of maintenance dredging and 52,000 cy of knockdown in no more than 26 discrete episodes, over ten years, in areas shown in Exhibits C through V, to be completed by December 1, 2019. Amendment No. Three increased the maintenance dredging volume at Pier 27 to 298,000 cy from 240,000 cy and expanded the dredging footprint. As part of Amendment No. Three, Exhibit A and Exhibit M were updated to reflect the new volume and footprint (Amendment No. Three). Amendment No. Four increased the maintenance dredging volume at Pier 27 to 308,000 cy from 298,000 cy, thereby increasing the total dredging volume of the permit from 4.4 mcy to 4.41 mcy. As part of Amendment No. Four, Exhibit A was updated to reflect the new permitted volumes (Amendment No. 4). Amendment No. Five increased maintenance dredging volume at Pier 27 from 308,000 cy to 510,963 cy. In order to remain within the total authorized dredge volume of 4.41 mcy, the dredge volumes of other Port berth areas were revised as shown in a newly updated Exhibit A (Amendment No. Five).

C. The project authorized by this amended permit is consistent with the McAteer-Petris Act and with the San Francisco Bay Plan in that it will not adversely affect the Bay nor public access to and enjoyment of the Bay. The Special Conditions have been included to ensure that the project minimizes potential adverse impact to native, endangered, and/or special status species, and Bay water quality. Regarding the state-listed longfin smelt, the permittee, as directed by CDFW, has determined that longfin smelt will not be taken as part of this project. ("Take" under the California Endangered Species Act means to "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture, or kill.") Commission staff has requested the concurrence or objection to this determination. CDFW has not responded to the Commission staff request (Amendment No. Two). The project also adheres to the Bay Plan's dredging policies in that dredged material disposal will not cause further sedimentation or harmful effects to the ecology of the Bay. The expanded dredging footprint authorized by Amendment No. Three has been dredged by the Port in the past, and thus is considered maintenance dredging. The increase in dredging volume for Pier 27 authorized by Amendments Nos. Four

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and Five do not change the overall total volume of 4.41 mcy permitted to the Port. By revising the maintenance dredging volumes of various berth areas to stay within this previously authorized total, the Port adheres to Bay Plan dredge policies in that the dredging conducted for navigational safety is also the minimum dredging volume necessary for the project (Amendment Five).

D. The Commission further finds, declares, and certifies that the activity or activities authorized herein are consistent with the Commission's Amended Management Program for San Francisco Bay, as approved by the Department of Commerce under the Federal Coastal Zone Management Act of 1972, as amended.

E. Pursuant to Article 19, Section 15304(g) of the California Environmental Quality Act (CEQA) and Regulation Section 11501, the project authorized by this permit is categorically exempt from the requirement to prepare an environmental impact report unless the project will result in take of a listed species that is not covered by the LTMS Policy Environmental Impact Statement/Programmatic Environmental Impact Report and will require a take permit. If a take permit is required, additional CEQA documentation will be required (Amendment No. Two).

F. Pursuant to Regulation Section 10620, the original project was listed with the Commission on September 18, 2003.

IV. Standard Conditions

A. **Permit Execution**. This amended permit shall not take effect unless the permittee executes the original of this amended permit and returns it to the Commission within ten days after the date of the issuance of the amended permit. No work shall be done until the acknowledgment is duly executed and returned to the Commission.

B. **Notice of Completion.** The attached Notice of Completion and Declaration of Compliance form shall be returned to the Commission within 30 days following completion of the work.

C. **Permit Assignment**. The rights, duties, and obligations contained in this amended permit are assignable. When the permittee transfers any interest in any property either on which the activity is authorized to occur or which is necessary to achieve full compliance of one or more conditions to this amended permit, the permittee/transferor and the transferee shall execute and submit to the Commission a permit assignment form acceptable to the Executive Director. An assignment shall not be effective until the assignee executes and the Executive Director receives an acknowledgment that the assignee has read and understands the amended permit and agrees to be bound by the terms and conditions of the amended permit, and the assignee is accepted by the Executive Director as being reasonably capable of complying with the terms and conditions of the amended permit.

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D. **Permit Runs With the Land**. Unless otherwise provided in this amended permit, the terms and conditions of this amended permit shall bind all future owners and future possessors of any legal interest in the land and shall run with the land.

E. Other Government Approvals. All required permissions from governmental bodies must be obtained before the commencement of work; these bodies include, but are not limited to, the U. S. Army Corps of Engineers, the State Lands Commission, the Regional Water Quality Control Board, and the city or county in which the work is to be performed, whenever any of these may be required. This amended permit does not relieve the permittee of any obligations imposed by State or Federal law, either statutory or otherwise.

F. **Built Project must be Consistent with Application**. Work must be performed in the precise manner and at the precise locations indicated in your application, as such may have been modified by the terms of the amended permit and any plans approved in writing by or on behalf of the Commission.

G. Life of Authorization. Unless otherwise provided in this amended permit, all the terms and conditions of this amended permit shall remain effective for so long as the amended permit remains in effect or for so long as any use or construction authorized by this amended permit exists, whichever is longer.

H. **Commission Jurisdiction**. Any area subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission under either the McAteer-Petris Act or the Suisun Marsh Preservation Act at the time the amended permit is granted or thereafter shall remain subject to that jurisdiction notwithstanding the placement of any fill or the implementation of any substantial change in use authorized by this amended permit. Any area not subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission that becomes, as a result of any work or project authorized in this amended permit, subject to tidal action shall become subject to the Commission's "bay" jurisdiction.

I. Changes to the Commission's Jurisdiction as a Result of Natural Processes. This amended permit reflects the location of the shoreline of San Francisco Bay when the permit was issued. Over time, erosion, avulsion, accretion, subsidence, relative sea level change, and other factors may change the location of the shoreline, which may, in turn, change the extent of the Commission's regulatory jurisdiction. Therefore, the issuance of this amended permit does not guarantee that the Commission's jurisdiction will not change in the future.

J. Violation of Permit May Lead to Permit Revocation. Except as otherwise noted, violation of any of the terms of this amended permit shall be grounds for revocation. The Commission may revoke any amended permit for such violation after a public hearing held on reasonable notice to the permittee or its assignee if the amended permit has been effectively assigned. If the amended permit is revoked, the Commission may determine, if it deems appropriate, that all or part of any fill or structure placed pursuant to this amended permit shall be removed by the permittee or its assignee if the amended permit has been assigned.

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K. Should Permit Conditions Be Found to be Illegal or Unenforceable. Unless the Commission directs otherwise, this amended permit shall become null and void if any term, standard condition, or special condition of this amended permit shall be found illegal or unenforceable through the application of statute, administrative ruling, or court determination. If this amended permit becomes null and void, any fill or structures placed in reliance on this amended permit shall be subject to removal by the permittee or its assignee if the amended permit has been assigned to the extent that the Commission determines that such removal is appropriate. Any uses authorized shall be terminated to the extent that the Commission determines that such uses should be terminated.

Executed at San Francisco, California, on behalf of the San Francisco Bay Conservation and Development Commission on the date first above written.

LAWRENCE J. GOLDZBAND Executive Director San Francisco Bay Conservation and Development Commission

LG/PS/gg

cc: Mark D'Avignon, U.S. Army Corps of Engineers Jason Brush, U.S. Environmental Protection Agency Beth Christian, S.F. Bay Regional Water Quality Control Board Al Franzoia, State Lands Commission Arn Aarreberg, California Department of Fish and Wildlife Gary Stern, NOAA Fisheries Ryan Olah, U.S. Fish and Wildlife Service San Francisco County Planning Department Christine Boudreau, Boudreau Associates, LLC

* * * * *

Receipt acknowledged, contents understood and agreed to:

Executed at _____

Applicant

On _____

By: _

Title

PERMIT NO. M2002.071.00 Port of San Francisco (Issued on September 19, 2003, As Amended Through July 14, 2016) AMENDMENT NO. FIVE Page 11

K. Should Permit Conditions Be Found to be Illegal or Unenforceable. Unless the Commission directs otherwise, this amended permit shall become null and void if any term, standard condition, or special condition of this amended permit shall be found illegal or unenforceable through the application of statute, administrative ruling, or court determination. If this amended permit becomes null and void, any fill or structures placed in reliance on this amended permit shall be subject to removal by the permittee or its assignee if the amended permit has been assigned to the extent that the Commission determines that such removal is appropriate. Any uses authorized shall be terminated to the extent that the Commission determines that such uses should be terminated.

Executed at San Francisco, California, on behalf of the San Francisco Bay Conservation and Development Commission on the date first above written.

LAWRENCE J. GOLDZBAND

Executive Director San Francisco Bay Conservation and Development Commission

LG/PS/gg

cc: Mark D'Avignon, U.S. Army Corps of Engineers Jason Brush, U.S. Environmental Protection Agency Beth Christian, S.F. Bay Regional Water Quality Control Board Al Franzoia, State Lands Commission Arn Aarreberg, California Department of Fish and Wildlife Gary Stern, NOAA Fisheries Ryan Olah, U.S. Fish and Wildlife Service San Francisco County Planning Department Christine Boudreau, Boudreau Associates, LLC

Receipt acknowledged, contents understood and agreed to:

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By: Title

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Item Line Item Line Colo-2014 Colo-2014 Pier 9 South Berth -35 5,000 5,000 Pier 9 North Berth -35 5,000 5,000 Pier 9 North Berth -35 5,000 5,000 Pier 15/17 Face -40 1.4 2,000 Duter Fisherman's Wharf -12 to -20 3.7 15,000 Duter Fisherman's Wharf -20 48.7 7,5000 Duter Fisherman's Wharf -20 48.7 7,5000 Duter Fisherman's Wharf -20 9.5 10,000 Pier 35 East Berth -35 11.6 415,000 Pier 33/31 Berths -35 5.3 0 0 Pier 33/31 Berths -35 5.3 0 0 Pier 33/31 Berths -33/31 Berth -35 0 0 Pier 32 Fast Berth -33/31 Berths -35 0 0 Pier 33/31 Berths -33/31 Berths -35 0 0 Pier 35 West Berth -30 0 19.1		Project Depth	Surface Area of permitted	Estimated Volume (CY)	Estimated Volume (CY)	Total Estimate
Pier 9 South Berth -20 3.6 5,000 5,000 Pier 9 North Berth -35 3.5 5,000 2,000 Pier 15/17 Face -12 to -20 3.7 17,000 2,000 Pier 15/17 Face -12 to -20 3.7 17,000 2,000 Pier 15/17 Face -12 to -20 3.7 17,000 2,000 Pier 45 E/43 17 Berths -20 9.2 10,000 2,000 Pier 35 East Berth -35 8.1 400,000 2,000 2,000 Pier 35 South Fary -35 8.1 10,000 2,000 2,000 2,000 2,000 2,000 2,000 2,000 2,000 2,000 2,000 2,000 2,000 2,000		(# MLLW)	boundary (sq ft)	2010 -2014	2015-2019	Volume (CY) over 10 years
Pier 9 North Berth 35 3.5 5,000 5 Pier 9 North Berth -40 1.4 2,000 1 Pier 15/17 Face -12 to -20 3.7 15,000 1 Diner Fisherman's Wharf -20 3.7 15,000 1 Direr Fisherman's Wharf -35 5.8 17,000 1 Direr Fisherman's Wharf -35 5.8 10,000 1 Pier 35 Fast Berth -35 11.6 415,000 1 Pier 35 Fast Berth -35 8.1 400,000 1 1 20,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 1 10,000 1 1 10,000 1 1	Pier 9 South Berth	-20	3.6	5,000	10,000	15,000
Pier 15/17 Face -40 1.4 2,000 Inner Fisherman's Wharf -12 to -20 3.7 15,000 Inner Fisherman's Wharf -20 3.7 15,000 Duter Fisherman's Wharf -20 3.7 15,000 Duter Fisherman's Wharf -20 9.2 10,000 Pier 45 £13 1/2 Berths -20 9.2 10,000 Pier 35 East Berth -35 8.1 400,000 Pier 33 (Fabrits) -35 8.1 400,000 Pier 33 (Fabrits) -35 8.1 400,000 Pier 23 Berth -35 8.1 400,000 Pier 29 Berth -35 9.6 286,985 Pier 20 Berth -35 9.6 286,985 Pier 20 Berth -35 9.6 2000 Pier 20 Berth -35 9.6 2000 Pier 20 Berth -35 9.6 10,000 Pier 20 Berth -20 19.1 20,000 Pier 20 Berth -28 5.7 10,000	Pier 9 North Berth	-35	3.5	5,000	10,000	15,000
Inner Fisherman's Wharf .12 to -20 3.7 15,000 Outer Fisherman's Wharf -20 48.7 75,000 Per 43 [41 Berths -35 5.8 17,000 Per 43 [41 Berths -20 9.2 10,000 Per 43 [41 Berths -20 9.2 10,000 Per 43 [41 Berths -35 8.1 400,000 Per 33 [43 Berth -35 8.1 400,000 Per 33 [43 Berth -35 8.1 400,000 Per 33 [31 Berths -35 8.1 400,000 Per 33 [31 Berths -35 9.16 25,000 Per 23 Berth -35 9.16 20,000 Per 23 Berth -35 9.16 20,000 Per 33 [31 Berths -35 9.16 20,000 Per 44[50 N Berths Approach -35 9.16 0 Per 50 South Face -35 5.3 0 0 Per 50 South Face -35 5.3 10,000 10,000 Per 50 South Face -35	Pier 15/17 Face	-40	1.4	2,000	2,000	4,000
Outer Fisherman's Wharf -20 48.7 75,000 Per 43 L12 Berths -35 5.8 11,000 17,000 Per 43/41 Berths -20 9.2 60,000 17,000 Per 43/41 Berths -12 20 60,000 17,000 Per 33 East Berth -35 8.1 415,000 17,000 Per 33/31 Berths -35 8.1 400,000 17,000 Per 33/31 Berths -35 8.1 400,000 17,000 Per 33/31 Berths -35 9.6 0 0 Per 23 Berth -35 5.3 0 0 0 Per 33/31 Berths -35 5.3 0	Inner Fisherman's Wharf	-12 to -20	3.7	15,000	15,000	30,000
Pier 45 E/43 1/2 Berths -35 5.8 17,000 Pier 45 E/43 1/2 Berths -20 9.2 10,000 1 Pier 43/41 Berths -20 9.2 10,000 1 Pier 39 (East and West Marina Basins) -12 20 60,000 1 Pier 39 (East and West Marina Basins) -35 11.6 415,000 1 Pier 35 West Berth -35 11.6 415,000 1 1 Pier 33/31 Berths -35 5.3 9.6 286,985 1 0 1 1 1 0 1 1 1 0 1 1 1 0 1 1 1 1 0 1 1 1 0 1 </td <td>Outer Fisherman's Wharf</td> <td>-20</td> <td>48.7</td> <td>75,000</td> <td>75,000</td> <td>150,000</td>	Outer Fisherman's Wharf	-20	48.7	75,000	75,000	150,000
Per 43/41 Berths -20 9.2 10,000 10 Per 43/41 Berths -12 20 60,000 10 Per 33 (East and West Marina Basins) -35 11.6 415,000 10 Per 33 (East and West Marina Basins) -35 11.6 415,000 10 Per 33 (East Berth -35 5.3 0 0 0 Per 33/31 Berths -35 5.3 0 0 0 0 Per 23 Berth -35 0 -35 0	Pier 45 E/43 1/2 Berths	-35	5.8	17,000	50,000	67,000
Fier 39 (East and West Marina Basins) -12 20 60,000 Fier 35 East Berth 35 11.6 415,000 Fier 35 Fier 35 East Berth 35 11.6 415,000 Fier 35 Fier 35 East Berth 35 11.6 415,000 Fier 35 Next Berth 33/31 Berth 2.5 5.3 0 0 7 7 400,000 Fier 33/31 Berth 33/31 Berth 3.5 2.5 0	Per 43/41 Berths	-20	9.2	10,000	20,000	30,000
Fier 35 East Berth -35 11.6 $415,000$ 11.6 $415,000$ 11.6 $415,000$ 11.6 11.6 11.6 11.6 11.6 11.6 11.6 11.6 11.6 11.6 11.6 11.6 11.6 11.6 11.6 11.6 11.6 11.6 10.000 11.6 </td <td>Pier 39 (East and West Marina Basins)</td> <td>-12</td> <td>20</td> <td>60,000</td> <td>60,000</td> <td>120,000</td>	Pier 39 (East and West Marina Basins)	-12	20	60,000	60,000	120,000
Pier 35 West Berth -35 8.1 $400,000$ 100 Pier 33/31 Berths -35 5.3 0 0 Pier 29 Berth -35 2.5 0 0 Pier 29 Berth -35 2.5 0 0 Pier 29 Berth -35 0.6 $286,985$ 0 Pier 29 Berth -35 0.6 $286,985$ 0 Downtown Ferry Terminal Plaza, Pier $1/2$ and $1E$ -20 19.1 $20,000$ Downtown Ferry Terminal Plaza, Pier $1/2$ and $1E$ -20 19.1 $20,000$ Pier 30/32 Berths Berths -38 6.8 $10,000$ Pier 50 South Face -42 5.3 23.4 $10,000$ Pier 50 South Berth -35 23.4 $10,000$ $10,000$ Pier 50 South Berth -35 23.4 $10,000$ $10,000$ Pier 50 South Berth -35 23.4 $10,000$ $10,000$ Pier 50 South Berth $-50,000$ $10,000$	Pier 35 East Berth	-35	11.6	415,000	415,000	830,000
Fier 33/31 Berths -35 5.3 0 Pier 29 Berth -35 9.6 5.85 0 Pier 29 Berth -35 9.6 286,985 0 Pier 27 Berth* -35 9.6 286,985 0 Downtown Ferry Terminal Plaza, Pier 1/2 and 1E -20 19.1 20,000 286,985 Downtown Ferry Terminal Plaza, Pier 1/2 and 1E -20 19.1 20,000 286,985 Downtown Ferry Terminal Plaza, Pier 1/2 and 1E -20 19.1 20,000 286,985 Pier 48/50 N Berths -35 23.4 10,000 23.4 10,000 Pier 50 South Berth -35 23.4 10,000 23.4 10,000 Pier 50 South Berth -35 27.7 5,000 26,000 </td <td>Pier 35 West Berth</td> <td>-35</td> <td>8.1</td> <td>400,000</td> <td>400,000</td> <td>800,000</td>	Pier 35 West Berth	-35	8.1	400,000	400,000	800,000
Jer 29 Berth -35 2.5 0 Pier 27 Berth* -35 9.6 286,985 286,985 Downtown Ferry Terminal Plaza, Pier 1/2 and 1E -20 19.1 20,000 Berths -38 6.8 200,000 200,000 Berths -38 6.8 200,000 200,000 Pier 28 E to 30/32 Berths -35 23.4 10,000 200 Pier 48/50 N Berth -35 23.4 10,000 200 Pier 50 South Face -42 5.3 0 0 25.6 80,000 Pier 50 South Berth -35 17.7 5,000 25.000	Pier 33/31 Berths	-35	5.3	0	15,000	15,000
Pier 27 Berth* -35 9.6 286,985 286,985 Downtown Ferry Terminal Plaza, Pier 1/2 and 1E -20 19.1 20,000 200 Downtown Ferry Terminal Plaza, Pier 1/2 and 1E -20 19.1 20,000 200 Downtown Ferry Terminal Plaza, Pier 1/2 and 1E -20 19.1 20,000 200 Pier 28 E to 30/32 Berths -38 6.8 200,000 23.4 10,000 20 Pier 48/50 N Berths & Approach -35 23.4 10,000 20 23.4 10,000 20	Pier 29 Berth	-35.	2.5	0	15,000	15,000
Downtown Ferry Terminal Plaza, Pier 1/2 and 1E -20 19.1 20,000 2 Berths -38 6.8 200,000 1 Pier 28 E to 30/32 Berths -38 6.8 200,000 1 Pier 28 E to 30/32 Berths -35 5.3 0 1 Pier 48/50 N Berths & Approach -35 5.3 0 1 10,000 1 Pier 50 South Face -42 5.3 0 0 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 1 10,000 1 1 1 10,000 1 1 1 10,000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td>Pier 27 Berth*</td> <td>-35</td> <td>9.6</td> <td>286,985</td> <td>223,978</td> <td>510,963</td>	Pier 27 Berth*	-35	9.6	286,985	223,978	510,963
Pier 28 E to 30/32 Berths -38 6.8 200,000 1 Pier 48/50 N Berths & Approach -35 23.4 10,000 1 Pier 48/50 N Berths & Approach -35 5.3 0 0 1 Pier 50 South Face -42 5.3 0 0 1 0 1 10,000 1 10,000 1 10,000 1 10,000 1 10,000 1 10,000 1 10,000 1 10,000 1 10,000 1 10,000 1 10,000 1 110,000 1 10,000 1 10,000 1 10,000 1 10,000 1 10,000 1 10,000 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1 10,000 1 1	own Ferry Terminal Plaza, Pier 1/	-20	19.1	20,000	20,000	40,000
Pier 48/50 N Berths & Approach -35 23.4 $10,000$ $10,000$ Pier 50 South Face -42 5.3 0 0 Pier 50 South Berth -35 6.7 $10,000$ $10,000$ Pier 50 South Berth -35 6.7 $10,000$ $10,000$ Pier 50 South Berth -35 5.0 8.4 $12,000$ Pier 50 South Berth -20 8.4 $12,000$ $10,000$ Pier 54 N & S Berths and Approach -35 17.7 $5,000$ $10,000$ Pier 54 N & S Berths and Approach -35 25.6 $80,000$ $10,000$ Pier 50,00,92 Berths, Islais Creek Channel, -40 8.4 $12,000$ $15,000$ Piers 80,90,92 Berths and Approach Channels -40 81 $15,000$ $15,000$ Piers 94/96 Berths and Approach Channels -40 81 $15,000$ $15,000$ Piers 94/96 Berths and Approach Channels -20 23.6 $80,000$ $16,000$ Pier 38/40 Berths -35 6.9 $5,000$ $5,000$ Pier 38/40 Berths -35 6.9 $5,000$ $5,000$	Pier 28 E to 30/32 Berths	-38	6.8	200,000	200,000	400,000
Pier 50 South Face -42 5.3 0 0 Pier 50 South Berth -35 6.7 $10,000$ $10,000$ Pier 50 South Berth -35 5.00 8.4 $12,000$ Pier 52 Basin -35 17.7 $5,000$ 17.7 Pier 52 Basin -35 17.7 $5,000$ $10,000$ Pier 52 Basin -35 25.6 $80,000$ $10,000$ Pier 52 Basin -35 25.6 $80,000$ $10,000$ Pier 54 N & S Berths and Approach -35 25.6 $80,000$ $10,000$ Piers 80, 90, 92 Berths, Islais Creek Channel, -40 8.1 $15,000$ $10,000$ Piers 80, 90, 92 Berths, Islais Creek Channel, -40 8.1 $150,000$ $150,000$ Piers 94/96 Berths and Approach Channels -40 8.1 $150,000$ $150,000$ Pier 94/96 Berths and Approach Channels -40 8.1 $150,000$ $150,000$ Pier 36/38 N Berths $-338,000$ $-336,000$ $23.6,000$ $10,000$ Pier 38 S/40 Berths -35 6.9 $5,000$ $10,000$ Pier 38 S/40 Berths -35 $-35,000$ $23.6,000$ $10,000$	Pier 48/50 N Berths & Approach	-35	23.4	10,000	40,000	50,000
Pier 50 South Berth -35 6.7 $10,000$ $10,000$ Pier 52 Basin -20 8.4 $12,000$ $12,000$ Pier 54 N & S Berths and Approach -35 17.7 $5,000$ $12,000$ Pier 54 N & S Berths and Approach -35 25.6 $80,000$ $10,000$ Pier 54 N & S Berths and Approach -35 25.6 $80,000$ $10,000$ Pier 80, 90, 92 Berths, Islais Creek Channel, -40 50.2 $250,000$ $10,000$ Piers 80, 90, 92 Berths, Islais Creek Channel, -40 81 $150,000$ $150,000$ Piers 94/96 Berths and Approach Channels -40 81 $150,000$ $150,000$ Piers 94/96 Berths and Approach Channels -40 81 $150,000$ $150,000$ Piers 94/96 Berths and Approach Channels -40 81 $150,000$ $150,000$ Piers 94/96 Berths and Approach Channels -40 81 $150,000$ $150,000$ Pier 36/38 N Berths -35 6.9 $5,000$ $161,000$ $10,000$ Pier 38 S/40 Berths -35 -35 $5,000$ $10,000$ Pier 30,000 -35 $-35,000$ $-35,000$ $-35,000$	Pier 50 South Face	-42	5.3	0	10,000	10,000
Pier 52 Basin -20 8.4 $12,000$ 17.7 $5,000$ Pier 54 N & S Berths and Approach -35 17.7 $5,000$ $5,000$ Pier 54 N & S Berths and Approach -35 25.6 $80,000$ $80,000$ Piers 80, 90, 92 Berths, Islais Creek Channel, -40 50.2 $250,000$ $80,000$ Piers 80, 90, 92 Berths and Approach Channels -40 81 $150,000$ 81 $150,000$ Piers 94/96 Berths and Approach Channels -40 81 $150,000$ 81 $150,000$ Piers 94/96 Berths and Approach Channels -40 81 $150,000$ 81 $150,000$ Piers 94/96 Berths and Approach Channels -40 81 $150,000$ 81 $150,000$ Piers 94/96 Berths and Approach Channels -40 81 $125,000$ $80,000$ 81 $125,000$ $80,000$ $80,000$ $80,000$ $80,000$ $81,000$ $81,000$ $81,000$ $81,000$ $81,000$ $81,000$ $81,000$ $81,000$ $81,000$ $81,000$ $81,000$ $80,000$ $80,000$ $80,0000$	Pier 50 South Berth	-35	6.7	10,000	40,000	50,000
Pier 54 N & S Berths and Approach -35 17.7 $5,000$ $5,000$ Central Basin -35 25.6 $80,000$ $80,000$ Central Basin -40 50.2 $250,000$ $80,000$ Piers 80, 90, 92 Berths, Islais Creek Channel, -40 50.2 $250,000$ $80,000$ Approach Channels & Turning Basin -40 81 $150,000$ $15,000$ $15,000$ Piers 94/96 Berths and Approach Channels -20 23.6 $80,000$ $15,000$ $15,000$ Piers 94/96 Berths and Approach Channels -20 23.6 $80,000$ $15,000$ $15,000$ Piers 94/96 Berths and Approach Channels -20 23.6 $80,000$ $15,000$ $15,000$ Piers 94/96 Berths -35 -35 6.9 $5,000$ $161,000$ $161,000$ Pier 36/38 N Berths -35 6.9 $5,000$ $161,000$ $161,000$ $161,000$ Pier 38 S/40 Berths -35 6.9 $5,000$ $123,085$ $123,085$	Pier 52 Basin	-20	8.4	12,000	12,000	24,000
Central Basin -35 25.6 $80,000$ Piers 80, 90, 92 Berths, Islais Creek Channel, Approach Channels & Turning Basin -40 50.2 $250,000$ Piers 94/96 Berths and Approach Channels -40 81 $150,000$ $750,000$ Piers 94/96 Berths and Approach Channels -20 23.6 $80,000$ $750,000$ Piers 94/96 Berths and Approach Channels -20 23.6 $80,000$ $750,000$ Piers 94/96 Berths and Approach Channels -20 23.6 $80,000$ $715,000$ Piers 94/96 Berths and Approach Channels -35 6.9 $5,000$ $715,000$ Pier 36/38 N Berths -35 6.9 $5,000$ $715,000$ Pier 38 S/40 Berths -35 6.9 $5,000$ $715,000$	Pier 54 N & S Berths and Approach	-35	17.7	5,000	15,000	20,000
Piers 80, 90, 92 Berths, Islais Creek Channel, -40 50.2 250,000 Approach Channels & Turning Basin -40 81 150,000 Piers 94/96 Berths and Approach Channels -40 81 150,000 China Basin -20 23.6 80,000 South Beach Yacht Harbor -20 23.6 80,000 Pier 36/38 N Berths -35 4.2 5,000 Pier 38/40 Berths -35 6.9 5,000	Central Basin	-35	25.6	80,000	80,000	160,000
Piers 94/96 Berths and Approach Channels -40 81 150,000 China Basin -20 4.2 15,000 South Beach Yacht Harbor -20 23.6 80,000 Pier 36/38 N Berths -35 4.2 5,000 Pier 38/40 Berths -35 6.9 5,000	Piers 80, 90, 92 Berths, Islais Creek Channel, Approach Channels & Turning Basin	-40	50.2	250,000	250,000	500,000
China Basin -20 4.2 15,000 South Beach Yacht Harbor -20 23.6 80,000 Pier 36/38 N Berths -35 4.2 5,000 Pier 38/40 Berths -35 6.9 5,000 Table Values -35 6.9 5,000	Piers 94/96 Berths and Approach Channels	-40	81	150,000	150,000	300,000
South Beach Yacht Harbor -20 23.6 80,000 Pier 36/38 N Berths -35 4.2 5,000 Pier 38 S/40 Berths -35 6.9 5,000	China Basin	-20	4.2	15,000	15,000	30,000
Pier 36/38 N Berths -35 4.2 5,000 Pier 38 S/40 Berths -35 6.9 5,000 Total Main -35 6.9 5,000	South Beach Yacht Harbor	-20	23.6	80,000	80,000	160,000
Pier 38 S/40 Berths -35 6.9 5,000 Testal Values 416.1 2.132.985	Pier 36/38 N Berths	-35	4.2	5,000	25,000	30,000
Tettal Values 416.1 2.132.985	Pier 38 S/40 Berths	-35	6.9	5,000	25,000	30,000
	Total Volume		416.1	2,132,985	2,272,978	4,405,963
* Pier 27: Actual 2009-2014 dredging volumes; Port of San Francisco estimated volumes 2016-2019 (no dredging done in 2015)	+ Pier 27: Actual 2009-2014 dredging volumes; Port of Sa	ו Francisco estimate	ed volumes 2016-2019	(no dredging done		Revised 7/13/2016

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ft - feet; MLLW - Mean Lower Low Water; CY - cubic yards







San Francisco Bay Regional Water Quality Control Board

Sent via email to Jay.Ach@sfport.com

July 29, 2014 CIWQS Place ID 735444

Port of San Francisco Attn.: Mr. Jay Ach, Manager of Regulatory & Environmental Affairs Port of San Francisco, Pier 1 San Francisco, CA 94111

Subject: Water Quality Certification, Maintenance Dredging Program for 2014 through 2023 at the Port of San Francisco in the City and County of San Francisco

Dear Mr. Ach:

We have reviewed and hereby issue certification for the Port of San Francisco's (Port's) application to perform maintenance dredging at the Port's maritime facilities, located along the San Francisco waterfront extending from the historic Hyde Street pier to Heron's Head Park south of Pier 96 (Figure 1). The Port has applied for reissuance of a U.S. Army Corps of Engineers individual permit authorizing multiple episodes of dredging over a 10-year period (Corps File No. 2013 - 00333S) pursuant to section 404 of the Clean Water Act (33 USC 1344) (CWA) and section 10 of the Rivers and Harbors Act of 1899 (33 USC 403). Correspondingly, the Port has applied to the San Francisco Bay Regional Water Quality Control Board (Water Board) for a CWA section 401 water quality certification that the project will not violate State water quality standards.

Project

Maintenance Dredging

The Port conducts a maintenance dredging program to maintain safe navigation depths at its various facilities, which include deepwater berths serving cargo and cruise ships, commercial and recreational fishing vessel harbors and berths, a passenger ferry terminal, and small craft recreational marinas (see figures 3 through 21). The project involves mechanically dredging sediment from berths and marinas and adjacent to piers located along the San Francisco waterfront, as well as disposal and beneficial reuse of dredged material created by these activities, over a period of approximately 10 years, from the date of this certification through December 31, 2023. Dredging areas (footprints) are limited to the faces, approaches, and entrance channels to each berthing area up to the adjacent pier. The Port anticipates dredging a maximum of 4.4 million cubic yards (cy) of material during this period. Currently authorized project depths and estimated dredging volumes for berths and marinas at the Port are listed below in Table 1.

DR. TERRY F. YOUNG, CHAIR | BRUCE H. WOLFE, EXECUTIVE OFFICER

Location	Project	Surface Area	Estimated 10-Year	Figure
	Depth ¹	of Permitted	Dredging Volume ²	No.
	(feet	Boundary	(cubic yards)	
	MLLW)	(Acres)		
Pier 9 South Berth	-20	3.6	20,000	2
Pier 9 North Berth	-35	3.5	20,000	2
Pier 15/17 Face	-40	1.4	6,000	2
Inner Fisherman's Wharf	-12	3.7	30,000	3
Outer Fisherman's Wharf	-20	48.7	150,000	3
Pier 45 E/43 ¹ / ₂ Berths	-35	5.8	100,000	4
Pier 43/41 Berths	-20	9.2	40,000	5
Pier 39 (East & West Marina	-12	20.0	120,000	6
Basins)				
Pier 35 East Berth	-35	11.6	800,000	7
Pier 35 West Berth	-35	8.1	830,000	8
Pier 33/31 (Hornblower) Berths	-35	5.3	30,000	9
Pier 29 Berth	-35	2.5	30,000	10
Pier 27 Berth	-35	9.6	710,000	11
Downtown Ferry Terminal, Ferry	-20	19.1	40,000	12
Plaza, Pier ¹ / ₂ and 1E Berth				
Pier 28 E to 30/32 Berths	-38	6.8	100,000	13
Pier 48/50 N Berths & Approach	-35	23.4	60,000	14
Pier 50 South Face	-42	5.3	20,000	15
Pier 50 South Berth	-35	6.7	40,000	15
Pier 52 Basin	-20	8.4	24,000	16
Pier 54 N & S Berths & Approach	-35	17.7	30,000	16
Central Basin	-35	25.6	160,000	17
Piers 80, 90, 92 Berths, Islais	-40	35.7	500,000	18
Creek Channel, Approach				
Channels				
Pier 94/96 Berths and Approach	-40		250,000	18
Channels		81.0		
China Basin	-20	4.2	30,000	19
South Beach Yacht Harbor	-20	23.6	160,000	20
Pier 36/38 N Berths	-35	4.2	50,000	20
Pier 38 S/40 Berths	-35	6.9	50,000	20
Total for all locations		402	4,400,000	

 Table 1.
 Port of San Francisco Dredging Locations, Project Depths, and Estimated Dredging Volumes

¹ These depths do not include the 2-foot overdredge allowance authorized at each dredging location.

² The dredge limit for berths listed as one dredging location generally extends from pier to pier. Proposed footprints for this 10-yr dredging cycle are as shown in the figures accompanying this certification.

Knock-Down Dredging

The Port may need to occasionally perform knock-down dredging, or grading of underwater shoals, to supplement routine maintenance dredging episodes. Knock-down dredging is the redistribution of shoaled sediments within a project area, as opposed to regular maintenance

dredging, in which shoaled sediments are removed completely. Knock-down dredging is performed by dragging an I-beam towed by a boat across a shoal in order to redistribute the shoaled material within the project area. In areas where a towed I-beam could damage the face of a wharf, knock-downs can alternatively be performed by excavating shoaled material with a small clamshell bucket, raising it slightly above the bottom, and releasing the material near the bottom in a deeper area within the berth. The equipment for performing knock-down dredging can be mobilized more quickly and less expensively than normal dredging equipment. Knockdown dredging will be most useful in supplementing routine maintenance dredging when time constraints may not allow for normal dredging or when a shoal threatening navigation covers a small area of a project area that is otherwise at or below its permitted depth.

Disposal and/or Reuse of Dredged Material

In June 2014, the Port submitted an Integrated Alternatives Analysis (IAA) of disposal options for dredged material removed from the Port's waterfront maritime facilities in accordance with CWA section 404(b)(1). In July 2014, the Port submitted a revised table of dredged material placement volume allocations covering a three-year period (2013-2015), in which the Port commits to placing at least 77% of its maintenance dredging volume outside San Francisco Bay (i.e., 75.5% at the SF-DODS ocean disposal site and 1.6% upland). The remaining volume of dredged material (up to 23% of the total) will be placed at the Alcatraz Island aquatic disposal site (SF-11). Taking 77% of The Port's dredged material to an alternative placement location outside the Bay is consistent with the Long Term Management Strategy for Dredging (LTMS) program goals after 2012, which direct most material away from in-bay unconfined aquatic disposal as alternatives for material that cannot be beneficially reused.

For years 2016 – 2023, prior to obtaining written approval for future dredging episodes per Condition 6 of this certification, the Port will need to submit an additional IAA, acceptable to the Executive Officer, which evaluates the feasibility of using a variety of dredged material disposal and/or reuse locations other than in-bay disposal.

Approval of Dredging and Dredged Material Disposal Episodes

This certification requires that individual episodes of maintenance dredging, knock-down dredging, and dredged material disposal be approved by the Executive Officer prior to episode initiation (Condition 6). Episode approval will be coordinated through the multi-agency Dredged Material Management Office (DMMO), of which the Water Board is a member. We will consider approval of dredging episodes based on the results of a tiered sediment testing framework conducted according to applicable federal and State guidance and an analysis of practicable alternatives to aquatic disposal pursuant to CWA section 404(b)(1).

Potential Threat to Water Quality & Risk to Beneficial Uses Posed by PAHs in Sediment at Pier 39 Marina and Need for Further Investigation

As explained below, the information required by Condition 11 of this certification is necessary to determine whether sediment cleanup actions are needed in portions of the Pier 39 Marina East and West Basins.

Polycyclic aromatic hydrocarbons (PAHs) can enter San Francisco Bay sediment from a variety of anthropogenic sources that include discharges of unburned petroleum fuels and creosote from treated marine piles. PAHs are known to cause cancer, reproductive anomalies, and immune dysfunction; to impair growth and development; and to cause other impairments in benthic-dwelling fish exposed to sediment-associated PAHs both by direct contact with sediment and also through a diet of benthic invertebrate prey that can accumulate sediment-associated PAHs.

<u>Pre-dredge</u> sediment characterization testing conducted in 2012 in portions of the Pier 39 Marina (the areas labeled DU-1 in the East Basin and DU-3 in the West Basin – Figure 21) showed elevated concentrations of total PAHs in the sediment proposed for dredging: up to 15 times ambient concentrations in San Francisco Bay sediment. We conditioned approval of the 2012 dredging episode by requiring sampling and analysis for residual total PAHs in the exposed sediment surface (i.e., the z-layer, which is the top 6 inches of exposed sediment after completion of dredging). This was consistent with the requirements of the U.S. EPA's and U.S. Army Corps of Engineers' Programmatic Consultation on Essential Fish Habitat (EFH) Agreement with the National Marine Fisheries Service, dated June 9, 2011.

Dredging was completed in August 2012 and <u>post-dredge</u> sediment surface samples were collected in January 2013. The results of the post-dredge sediment surface testing are presented in the report prepared by Pacific EcoRisk: *Characterization of the Pier 39 Marina East and West Basin Z-Layer Sediments: Sampling and Analysis Results*, dated March 2013, and are summarized in the following table:

Sample Location Identifier	Total PAH Concentration (µg/kg dry wt.)	SF Bay Ambient (µg/kg dry wt.) (SFRWQCB 1998)	SF Bay 2014 Dredged Material Bioaccumulation Testing Threshold (µg/kg dry wt.)
P39E-DU1-01-Z	94,549		
P39E-DU1-01-Z Duplicate	41,459		
P39E-DU1-02-Z	14,883		
P39E-DU1-03-Z	11,425	3,390	4,500 ^a
P39E-DU1-04-Z	19,807		
P39E-DU1-06-Z	11,023		
P39W-DU3-03-Z	349,270		
P39W-DU3-04-Z	25,191		

Pier 39 East and West Basins Z-Layer Individual Core Sediment PAH Concentrations

a. The San Francisco Estuary Institute hosts a <u>Dredged Material Testing Thresholds</u> webpage that explains how the bioaccumulation testing threshold for PAHs is calculated using Regional Monitoring Program ambient sediment chemistry data.

The post-dredge analytical results above show even higher total PAH concentrations remaining in the exposed surface sediment after dredging than in the overlying sediment that was removed. This may not meet the requirements of San Francisco Bay Basin Water Quality Control Plan (Basin Plan) objectives 3.3.2, Bioaccumulation, which prohibits detrimental increases in concentrations of toxic substances in bottom sediments or aquatic life, and 3.3.18, Toxicity, which prohibits acute and chronic toxicity in ambient waters.

Because the sediment accretion rate is relatively slow in the marina, PAH-contaminated sediment may remain exposed for a prolonged period of time. This marina experiences a high volume of vessel traffic from ferries, the high speed "RocketBoat" tourist attraction, and smaller recreational vessels, which may resuspend and spread PAH-contaminated sediment beyond the current dredging footprint. Thus, there is a significant potential risk of impacts to beneficial uses from this contaminated sediment. For these reasons, the Water Board is requiring submission of the technical reports described in Condition 11 and may require cleanup actions to address impacts due to contaminated sediment, including the referenced PAH-contaminated sediment. The burden, including the costs of investigating the contamination, is reasonable in relation to the significant risks potentially present, as evidenced by the data collected to date.

California Environmental Quality Act

The project is categorically exempt from the requirements of the California Environmental Quality Act pursuant to Title 14 of the California Code of Regulations, section 15304(g), minor alterations to land—maintenance dredging.

Certification and Coverage under General Waste Discharge Requirements

I hereby issue an order certifying that any discharge from the referenced project, as conditioned by this Certification and Order, will comply with the applicable provisions of CWA sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards), and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this Water Quality Certification. The following conditions are associated with this certification:

Period of Certification

1. This certification is valid through December 31, 2023.

Dredging and Disposal Operations

- 2. Dredging shall be limited to the project depths and overdepth allowances shown in Table 1 and to the maintenance dredging footprints shown in the attached figures 2 through 20.
- 3. No overflow or decant water shall be discharged from any barge at any time.
- 4. Knock-down dredging shall be limited to 2,500 cy per event and a maximum of 5,000 cy per year from within the Port's approved dredging footprint as shown in figures 2 through 20. The Port shall submit pre- and post-grading soundings for each knock-down event showing that the material was redistributed within the berth, not removed from the berth.

5. During calendar years 2014-2015, the Port shall place no more than 23% of the sediment dredged from its maritime facilities at unconfined in-bay aquatic disposal sites (i.e., SF-10 and SF-11) and at least 77% at out-of-bay beneficial reuse (e.g., the Cullinan Ranch and Montezuma Wetland restoration projects and the Winter Island Levee) or disposal (e.g., SF-DODS) sites.

Episode Approval

- 6. Individual maintenance dredging, knock-down dredging, and disposal episodes shall not commence until authorized in writing by Water Board staff, following review by the DMMO. Project descriptions, requests for dredged material suitability determinations, and evaluations of disposal alternatives shall be reviewed by the DMMO. The Port shall follow applicable federal and State guidance on a tiered testing framework and on the preparation of reports.
- 7. If the Port plans to propose disposing dredged material in waters of the U.S. during the years 2016-2023, then, as a part of obtaining episode approvals for future dredging events, the Port shall submit an evaluation of disposal sites pursuant to CWA section 404(b)(1) and consistent with the goals of the LTMS Management Plan. The Port may either submit an analysis for each individual dredging episode or it may submit one or more IAAs, acceptable to the Executive Officer, for the remaining eight-year period of this certification. Evaluations shall include analyses of the feasibility of the following beneficial reuse and disposal options, and any others that are potentially available at the time of the analysis:
 - Tidal and sub-tidal habitat creation or restoration
 - Levee maintenance
 - Construction fill for grading
 - Open ocean disposal at SF-DODS
 - Upland disposal

Protection of Special Status Species

8. Dredging and disposal activities shall be limited to the work windows established by the California Department of Fish and Wildlife (CDFW), the National Marine Fisheries Service (NMFS), and the U.S. Fish and Wildlife Service (USFWS) in their Biological Opinions on the Long Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region, unless written authorization by the appropriate agencies to work outside these windows is provided to Water Board staff. As shown in the following table, the applicable work window for this dredging project is June 1 through November 30 of any year.

Species of Concern	Work Window Period	Consulting Agency
Pacific Herring	March 1 through November 30	CDFW
Chinook Salmon	June 1 through November 30	NMFS, CDFW*
Steelhead Trout	June 1 through November 30	NMFS

*If a federal agency and CDFW are both listed, CDFW generally defers to the federal agency.

9. This certification does not allow for the take, or incidental take, of any special status species. The Port is required, as prescribed in the State and federal endangered species acts, to consult with the appropriate agencies prior to commencement of the project. The Port shall use the appropriate protocols, as approved by CDFW, NMFS, and/or USFWS, to ensure that project activities do not adversely impact Preservation of Rare and Endangered Species, a beneficial use of San Francisco Bay and its tributaries as set forth in the Basin Plan.

Requirement for a Technical Report – In-Bay Disposal Monitoring

10. The Port shall provide a technical report that documents monitoring efforts designed to evaluate the water quality impacts of the dredged material discharge on waters of the State, pursuant to California Water Code (Water Code) section 13267.

Regional Monitoring Program

Please be aware that Condition 10 is an order for a technical report pursuant to Water Code section 13267. Dischargers of waste materials to the Bay, including those who dispose of dredged material, are required to monitor the impacts of their discharges under section 13267. This monitoring provides necessary information about ambient Bay water quality and potential long-term impacts of dredged material disposal. The Port may elect to participate in the San Francisco Estuary Regional Monitoring Program for Trace Substances (RMP) to fulfill this requirement or provide comparable data on an individual basis. The RMP is a coordinated and comprehensive long-term monitoring program with the goal of monitoring water and sediment quality to provide the scientific foundation for managing and improving the health of the San Francisco Bay aquatic ecosystem. Additionally, the RMP provides for special and pilot studies of interest to program participants.

Since 1992, many Bay Area dischargers have decided to provide this information through the RMP rather than through individual monitoring programs. The San Francisco Estuary Institute (SFEI), located in Richmond, administers the program with oversight by the Water Board. Dischargers may contribute money to the RMP, based on the RMP Dredger Fee Schedule Policy and any subsequent amendments, as approved by the RMP Steering Committee. The fees will be based on in-bay dredge disposal volumes calculated using post-dredge survey results provided to the Water Board and SFEI by the U.S. Army Corps of Engineers. If the post-dredge survey volumes for each fiscal year ending June 30 are not reported to the Water Board by September 1 of the next fiscal year (same calendar year), RMP dredger participants will be billed based on reported bin volumes, which may overestimate the volume actually dredged. The Water Board recognizes payments to the RMP as fulfilling requirements to provide information on water quality impacts under section 13267.

<u>Requirement for a Technical Report – Investigation of Threat to Water Quality & Risk to Aquatic</u> <u>Environment Posed by PAHs in Sediment at Pier 39 Marina</u>

11. The Port shall submit a technical report characterizing the potential threat to water quality and risk to aquatic life posed by PAHs in sediment at the Pier 39 Marina.

By not later than October 31, 2014, the Port shall submit a work plan and schedule for completing the investigation described below and submitting the results to the Water Board.

- a. Evaluate the potential impacts of PAHs in exposed surface sediment to beneficial uses in San Francisco Bay. The beneficial uses to be considered are those set forth in the Basin Plan for Central San Francisco Bay (i.e., commercial and sport fishing, estuarine habitat, fish migration, fish spawning, shellfish harvesting, water contact recreation, wildlife habitat, and protection of threatened and endangered species). This may include biological testing (e.g., benthic invertebrate toxicity and bioaccumulation) to determine adverse impacts to the aquatic food web, including benthic-dwelling fish species.
- b. Characterize the lateral and vertical extent of elevated PAH concentrations in sediment in the portions of the Pier 39 Marina currently permitted for dredging and likely to be dredged in the future.
- c. Investigate potential ongoing sources of PAH contamination to sediment within the Pier 39 Marina East and West Basins (e.g., shoreline petroleum seeps and creosote-treated piles) and identify measures to appropriately prevent and minimize further PAH discharges from those sources.

This requirement to investigate and characterize PAH contamination in Pier 39 Marina sediments, including the requirement to submit a work plan and schedule, is a requirement for technical reports made pursuant to Water Code section 13267, which allows the Water Board to require technical or monitoring program reports from any person who has discharged, discharges, proposes to discharge, or is suspected of discharging waste that could affect water quality. All reports required herein must be submitted acceptable to the Executive Officer. The attachment provides additional information about section 13267 requirements. Any extension in the above deadline must be confirmed in writing by Water Board staff.

Standard Conditions

- 12. The Port or its representative shall notify Water Board staff immediately by telephone and e-mail whenever an adverse condition occurs as a result of this activity. An adverse condition includes, but is not limited to, a violation or threatened violation of conditions of this certification, or a release of petroleum products or toxic chemicals to waters of the State. Pursuant to Water Code section 13267, a written notification of adverse condition shall be submitted to the Water Board within 30 days of occurrence. The written notification shall identify the adverse condition, describe the action necessary to remedy the condition, and specify a timetable, subject to the modifications of the Water Board, for remedial actions.
- 13. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the Water Code and section 3867 of Title 23 of the California Code of Regulations (23 CCR).
- 14. This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR subsection 3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

15. Certification is conditioned upon full payment of the required fee as set forth in 23 CCR section 3833. The total fee required for certification of the subject project is \$75,071. Water Board staff received payment in full on June 6, 2014.

Conclusion

This water quality certification applies to the project as proposed in the application materials. Please be advised that failure to implement the project as proposed is a violation of this certification. Any violation of certification conditions is subject to administrative civil liability pursuant to Water Code sections 13268 and 13350. Failure to meet any condition of a certification may subject the Port to civil liability imposed by the Water Board to a maximum of \$5,000 per violation day for violations of Water Code section 13267 technical report requirements and \$5,000 per violation day or \$10 for each gallon of waste discharged in violation of this certification.

We anticipate no further action on this request. Should new information come to our attention that indicates a water quality problem with this project, the Water Board may issue waste discharge requirements pursuant to 23 CCR section 3857.

If you have any questions, please contact Elizabeth Christian at (510) 622-2335, or by email, to echristian@waterboards.ca.gov.

Sincerely,

Bruce H. Wolfe Executive Officer

Attachments:

- Figure 1 Port of San Francisco Dredging Area Location Map
- Figure 2 Piers 9 and 15/17
- Figure 3 Inner and Outer Fisherman's Wharf (Piers 45 and 47)
- Figure 4 Pier 45 E
- Figure 5 Pier 43
- Figure 6 Pier 39 (East and West Marina Basins)
- Figure 7 Pier 35 East
- Figure 8 Pier 35 West
- Figure 9 Piers 31 and 33
- Figure 10 Pier 29
- Figure 11 Pier 27
- Figure 12 Downtown Ferry Terminal
- Figure 13 Piers 30/32

Figure 14 – Piers 48/50N
Figure 15 – Pier 50 South
Figure 16 – Piers 52 and 54 N&S
Figure 17 – Central Basin
Figure 18 – Piers 80, 90-96
Figure 19 – China Basin
Figure 20 – South Beach Yacht Harbor and Piers 38/40
Figure 21 – Pier 39 Marina East and West Basin Areas Above SF Bay Total PAH
Bioaccumulation Trigger Level
Fact Sheet – Requirements for Submitting Technical Reports
Under Section 13267 of the California Water Code

cc w/attachments (all via email):

State Water Resources Control Board (Stateboard401@waterboards.ca.gov) BCDC, San Francisco, CA (Brenda Goeden, brendag@bcdc.ca.gov) CA State Lands Commission , Sacramento, CA (Donn Oetzel, oetzeld@slc.ca.gov) DFW, Santa Rosa, CA (Arn Aarreberg, Arn.Aarreberg@wildlife.ca.gov) USACE, San Francisco, CA (Mark D'Avignon, mark.r.d'avignon@usace.army.mil) US EPA, WTR-8 (R9-WTR8-Mailbox@epa.gov) Christine Boudreau, Boudreau Associates (cboudreau@boudreaullc.com)



AERIAL SOURCE: ESRI basemaps. HORIZONTAL DATUM: California State Plane, Zone 3, NAD83, U.S. Feet.

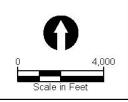
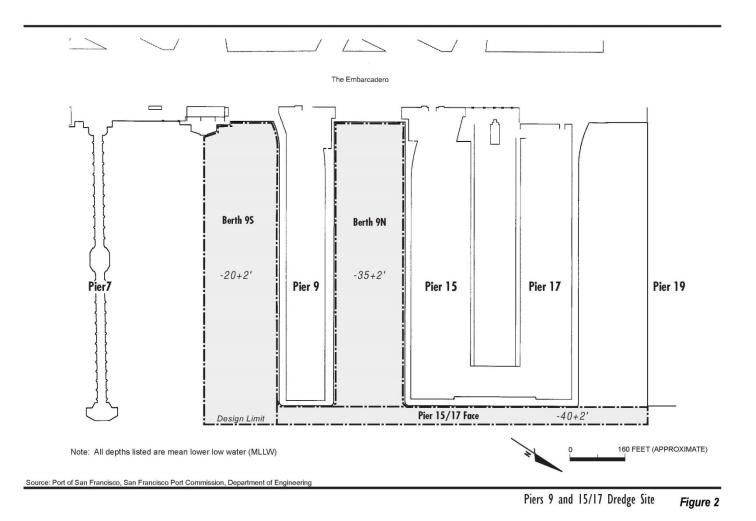
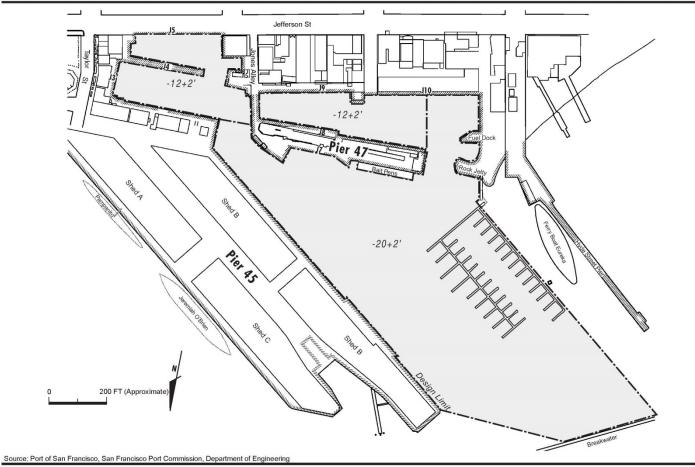
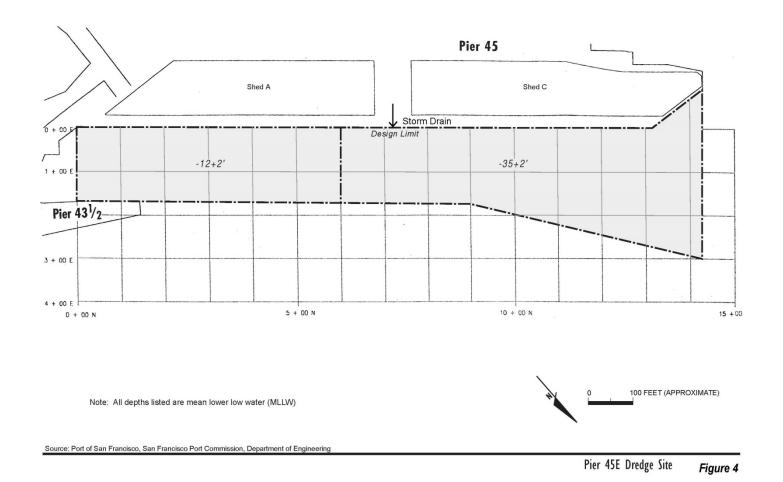


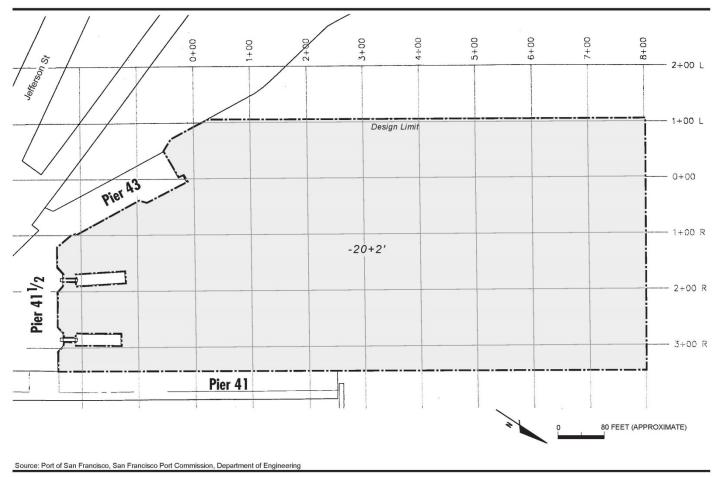
Figure 1. Port of San Francisco Dredging Area Location Map



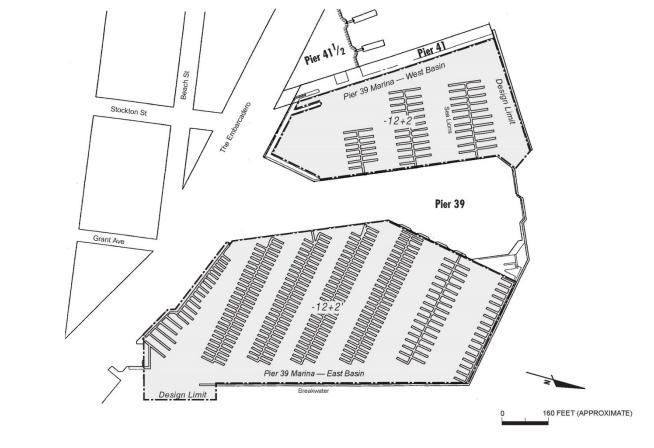


Fisherman's Wharf Piers 45 and 47 Dredge Site Figure 3



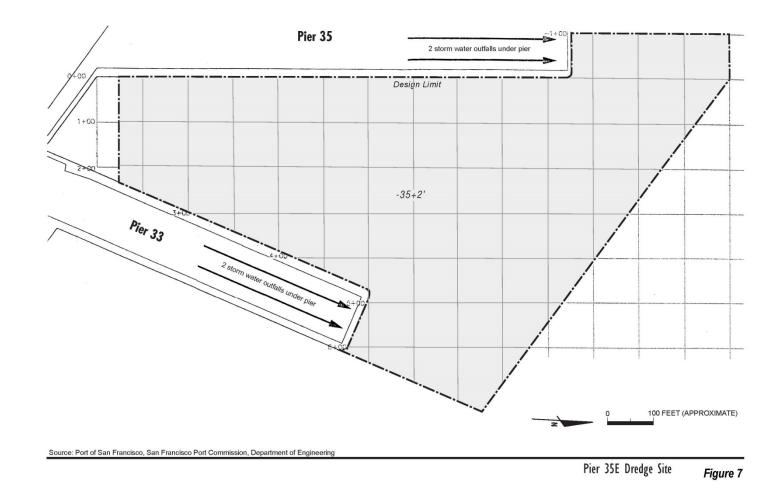


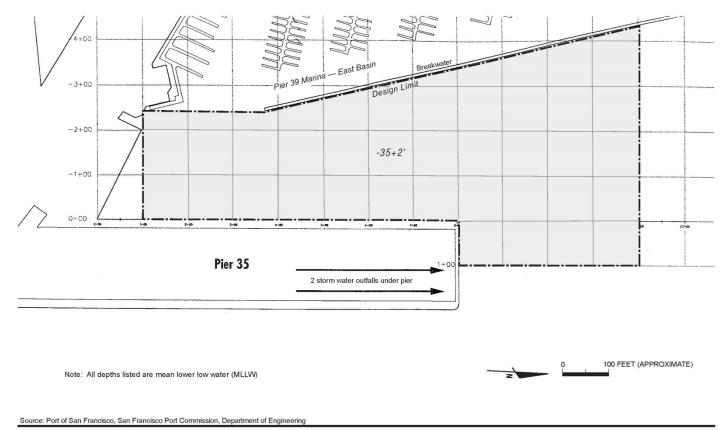
Pier 43 Dredge Site Figure 5



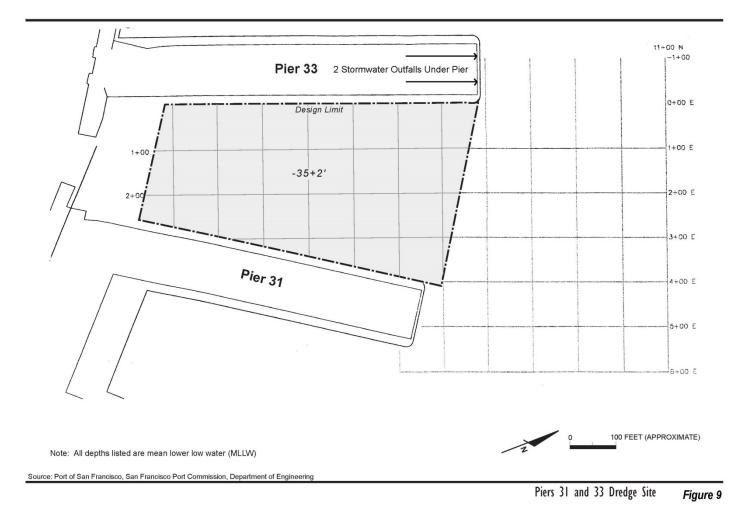
Source: Port of San Francisco, San Francisco Port Commission, Department of Engineering

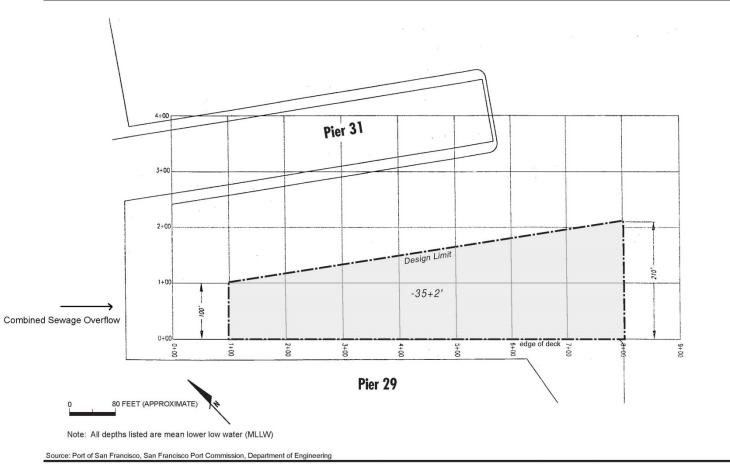
Pier 39 Dredge Sites Figure 6



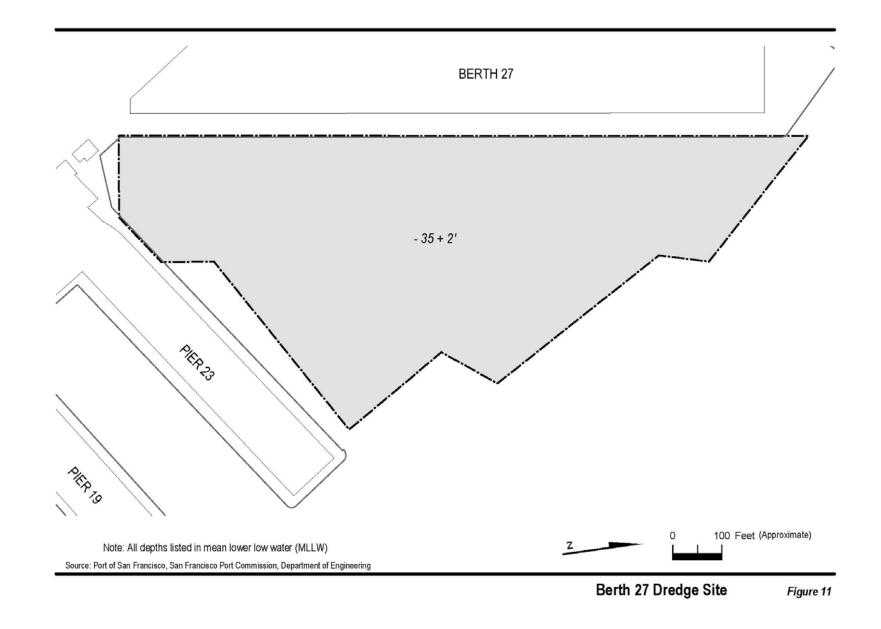


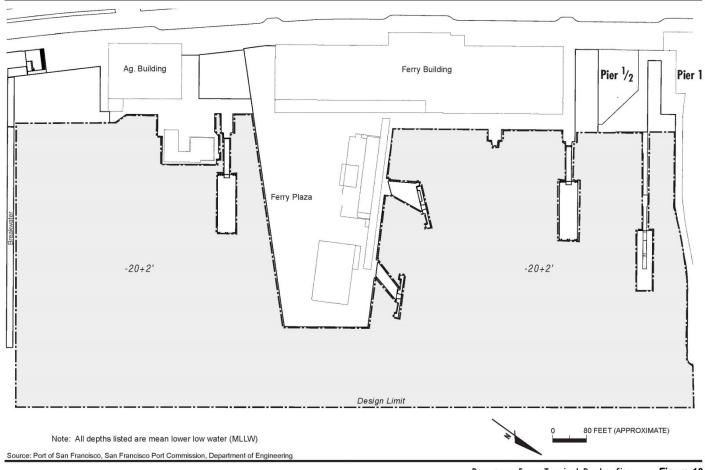
Pier 35W Dredge Site Figure 8



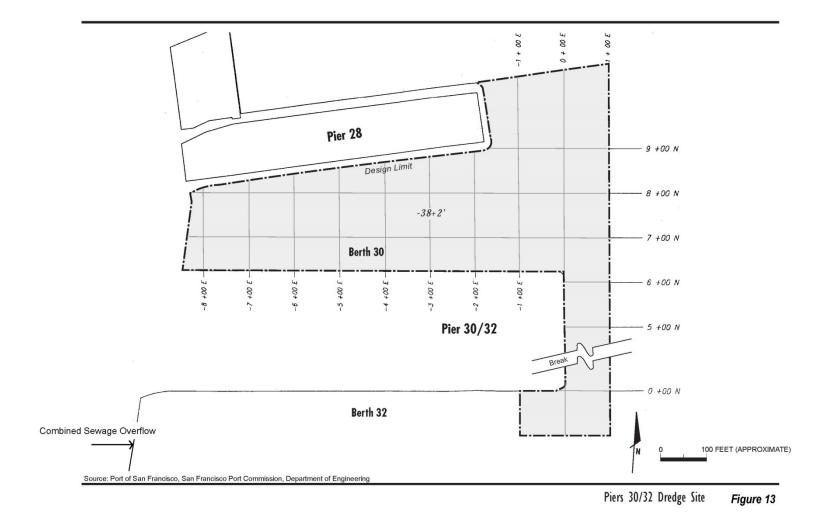


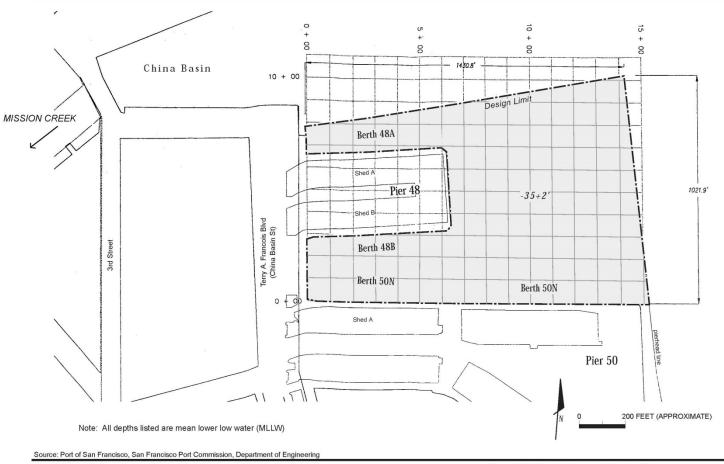
Pier 29 Dredge Site Figure 10



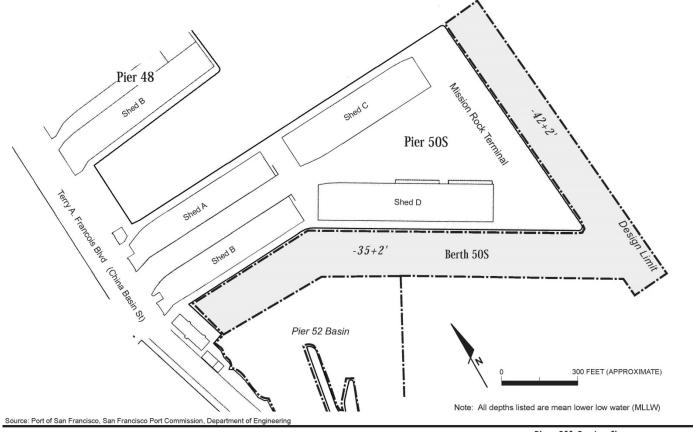


Downtown Ferry Terminal Dredge Site Figure 12

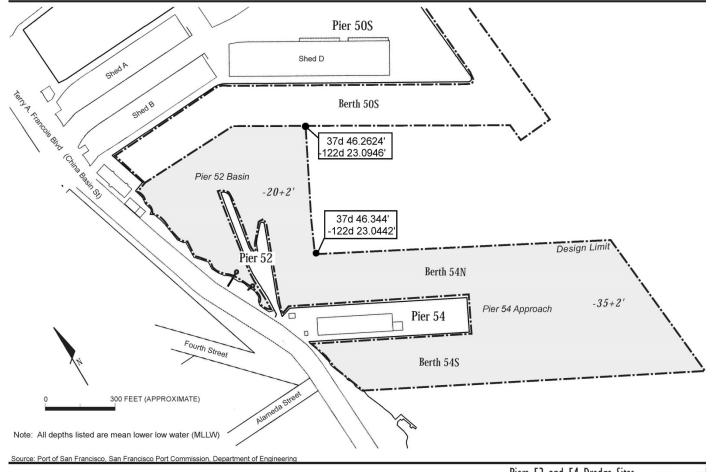




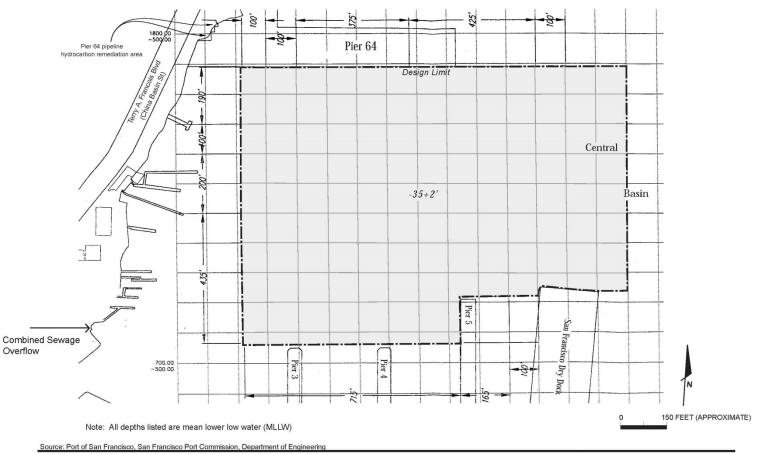
Piers 48/50N and Approach Dredge Site Figure 14



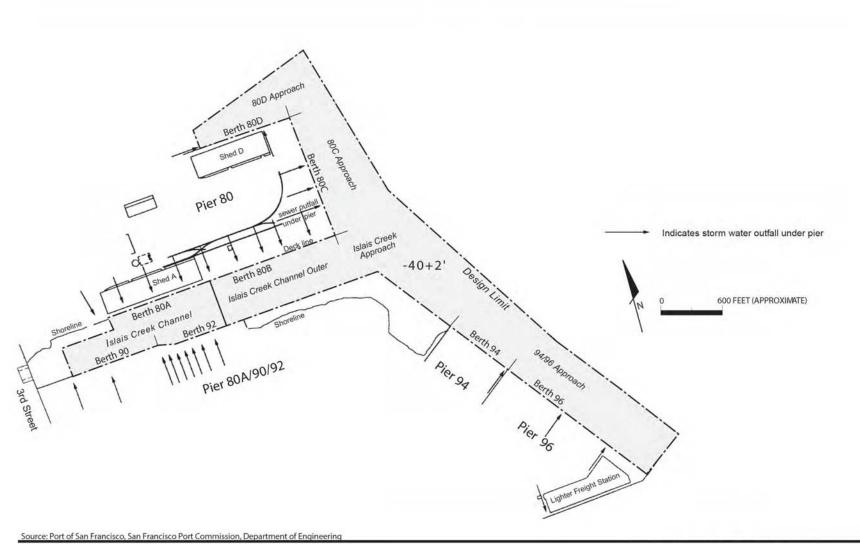
Piers 50S Dredge Sites Figure 15

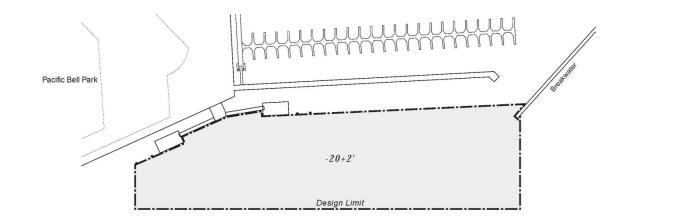


Piers 52 and 54 Dredge Sites Figure 16

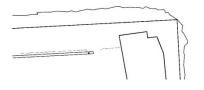








China Basin

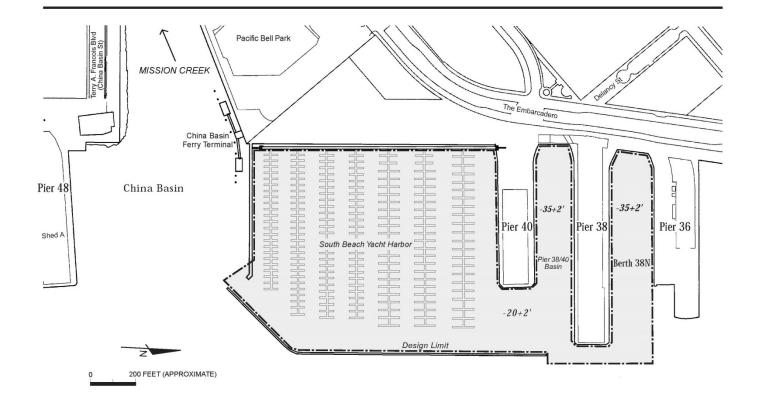


Note: All depths listed are mean lower low water (MLLW)

Source: Port of San Francisco, San Francisco Port Commission, Department of Engineering

120 FEET (APPROXIMATE)

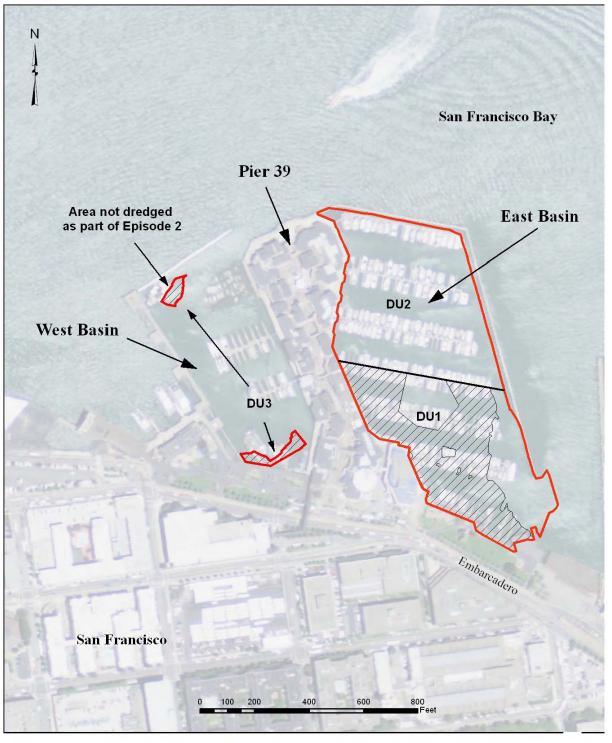
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Note: All depths listed are mean lower low water (MLLW)

Source: Port of San Francisco, San Francisco Port Commission, Department of Engineering

South Beach Yacht Harbor Piers 38 and 40 Dredge Site Figure 20



Legend

Project Area

Total PAH > Essential Fish Habitat bioaccumulation trigger (USEPA/ESACE 2012)

Figure 21. Pier 39 Marina East and West Basin Areas Above S.F. Bay Total PAH Bioaccumulation Trigger Level

Maintenance Dredging Work Windows by Area and Species

		Ja	an		Feb	N	/ar		Apr	N	lay	J	un	Jul		A	Jg	Sep	1	Oct	1	N	ov	1	Dec
Site	Species	1-15	16-31	1-1	15 16-28	1-15	16-3	31 1-1	5 16-30	1-15	16-31	1-15	16-30	1-15 1	5-31	1-15	16-31	1-15 16-	0 1-15	5 1	6-31	1-15	16-30	1-15	16-
SF Bay Bridge to Sherman Island	Chinook Salmon and Steelhead				c	aneutat	Son Rea	quired	10					ie de		Work Window									
Carguinez Bridge to Collinsville	Delta Smelt Water ≤10' "											6	ioneultată	on Regulae											
Carquinez bridge to Coliniavile	Delta Smelt Water > 10"							Consul	tation Requ	aired								Wo	Window	ġ.					
Napa and Petaluma Rivers, Sonoma Creek	Steelhead							Consul	tation Requ	aned							W	arkWindow			2	Cons	utation P	equired	
Napa River	Delta Smelt	Work V	Mindow						Consultat	ion Requ	ired					Work Window									
All areas within 45 meters of eeigrass habitat	Dungeness Crab		Work Window								Consultation Required						Work Window								
San Francisco Bay from Pinole Point to Redwood Creek	Pacific Herring	Consultation Required								14. 1				Work	Windo	w									euited
Richardson Bay & San Francisco Waterfront (Hard stop at November 30th)	Pacific Herring		ultatio	in Required									Work	Windo	w									euitatic quired	
Waters of Marin County from the Golden Gate Bridge to Richmond-San Rafael Bridge	Coho Salmon		Consultation Required								Work Window						Consultation Re								
Berkeley Marina to San Lorenzo Creek within 1 mile of coastline	California Least Tern		w	/unk W	Vindow	- 1	Consultation Required						Work Window												
South of Highway 92 Bridge (San Mateo-Hayward)	California Least Tern	2				Work	Window	w		Consultation Required									Work Window						
in areas with eeigrass beds	California Least Tern											6	ioneultab	on Require	1										
Baywide in areas of sait marsh habitat	California Clapper Rail											c	consultati	on Require											
Baywide within 250 feet of sait marsh habitat	California Clapper Rali	Work V	Vindow	Consultation Required												Work Window									
in and adjacent to sait marsh habitat	Salt Marsh Harvest Mouse											c	oneultati	on Require	i:										
Within 300 feet of known roost site	California Brown Pelican		Work Window								Consultation Required							red	Work Window						

For more decaded information, see Appendix F of the LTMS management Plan of the LTMS EndEds. * Depths are represented in MLLW, and are project depth, not including over dredge allowance **This chart is for operations and maintenance dredging of existing navigational facilities. Other species may be affected by work in other areas.

WORK WINDOW

CONSULTATION REQUIRED