



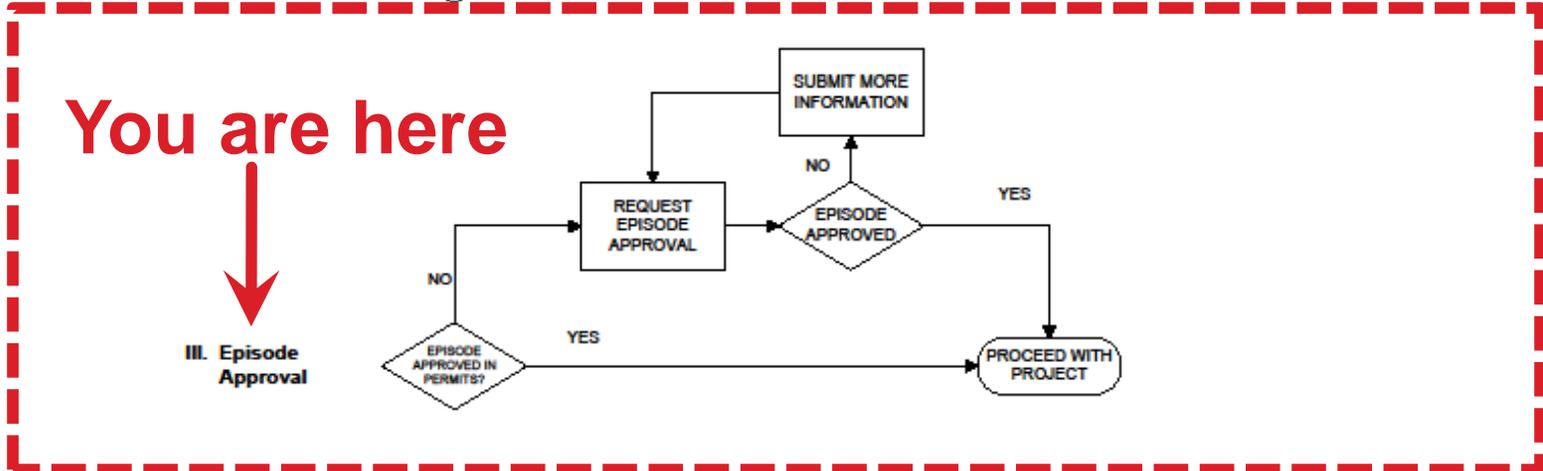
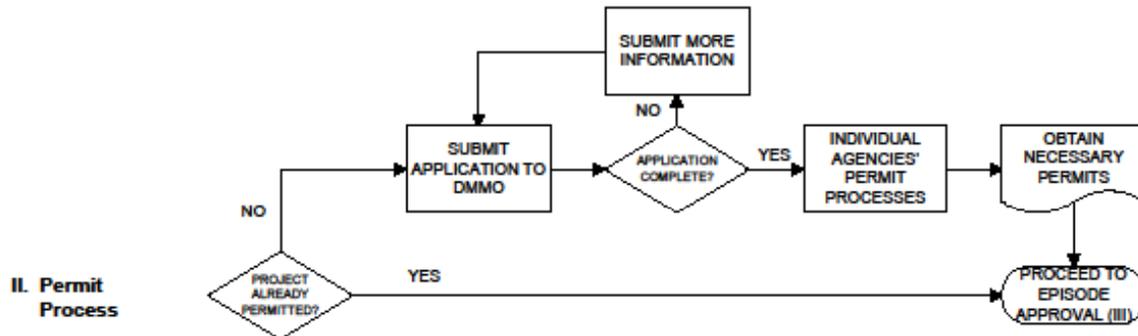
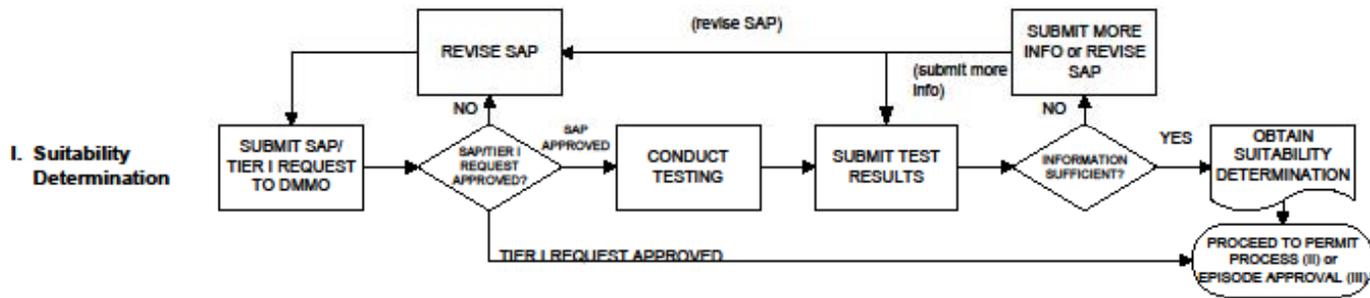
Episode Approval

Presented by
Jessica Burton Evans
USACE

April 30, 2010



Photo: Michael Slater, 2006



Outline

- What is a dredging episode?
- What approvals are needed?
- Pre-dredge submittals:
 - Pre-dredge Survey
 - Dredge Operation Plan
 - Solid Debris Management Plan
- Episode approval

What is a Dredge Episode?

1. Spatial Extent

- Dredge area (footprint) and depth

2. Temporal Extent

- Duration to complete a specific dredge footprint, start to finish
- May be split between calendar years due to dredging work window

3. Sediment Quality

- Material with similar characterization – SUAD vs. NUAD
- Intended placement options for discrete areas – Sand vs. Mud



What approvals are needed for a Dredge Episode?

1. Sediment suitability determination by the DMMO
2. Alternatives analysis
 - SDPAA
 - IAA
 - Episode Specific Alternatives Analysis
3. Water Quality Certification
 - Multi-Episode
 - Single Episode
4. Episode approval from USACE and BCDC
 - Pre-dredge submittals

Pre-dredge Submittals

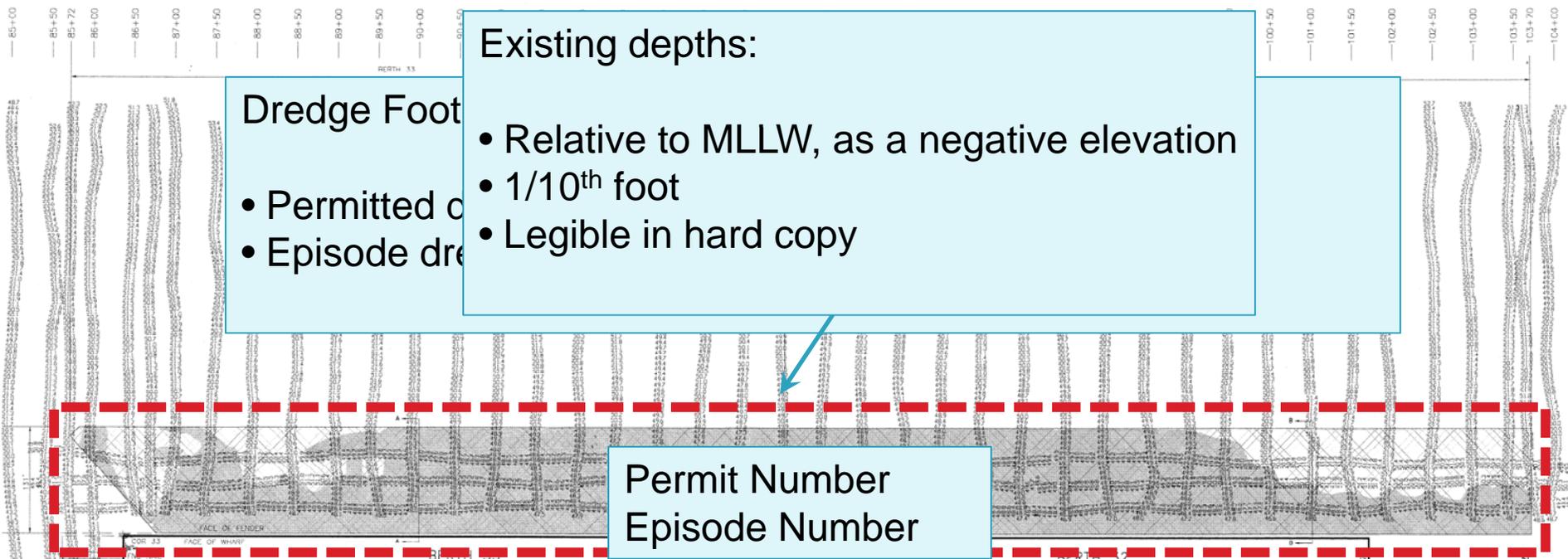
“Dredge Operation Plan”

1. Pre-dredge Survey
2. Dredge Operation Plan
3. Solid Debris Management Plan



Pre-Dredge Surveys

- Complete within 60–days prior to start of dredging
- Must include:
 - Include permit and dredge episode numbers
 - Existing depths – MLLW, 1 / 10th foot, legible
 - Dredge area– permitted and dredge episode
 - Estimated quantity to design depth
 - Estimated quantity to overdepth allowance
 - Signed by PERMITTEE
- Submit to USACE and BCDC, sometimes RWQCB



Existing depths:

Dredge Footprints

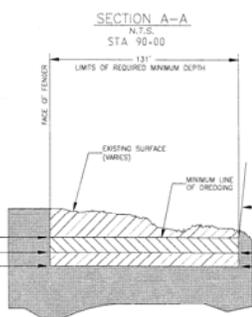
- Relative to MLLW, as a negative elevation
- 1/10th foot
- Legible in hard copy

- Permitted dredging
- Episode dredging

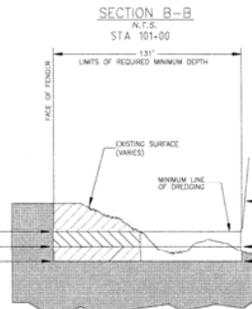
**Permit Number
Episode Number**

ESTIMATED DREDGE QUANTITIES

Dates	BERTH 32		BERTH 33	
	Est. Dredge Qty (cy)			
-50	5,600	6,000		
-51	9,800	10,100		
-52	13,900	14,200		



**DREDGING PERMIT NO.: 27629S
DREDGING EPISODE NO.: 32**



LEGEND

- Area higher in elevation than -50' when surveyed on 08/03 & 06/09
- Berth to be dredged to Elevation -50' minimum

- GENERAL NOTES**
- BATHYMETRY SURVEYED BY GAHAGAN & BRYANT ASSOCIATES, INC. ON AUGUST 3 & 6, 2009.
 - SOUNDINGS ARE BASED ON MEAN LOWER LOW WATER VERTICAL DATUM.
 - PLANE TABLE BEARINGS AND COORDINATES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, LAMBERT CONFORMAL PROJECTION, ZONE 11 (NAD83) AS DESCRIBED IN SPECIAL PUBLICATION NO. 253 PUBLISHED BY THE NATIONAL OCEANIC SURVEY.
 - SOUNDINGS WERE ACQUIRED BY FATHOMETER AND ARE SHOWN TO THE NEAREST TENTH OF A FOOT. THE STATION REFERENCED TO TIDAL BENCHMARK "4188 1984", ELEV. = 13.86' MEAN, LOCATED ON THE SOUTHWEST CORNER OF BERTH 7 IN OAKLAND OUTER HARBOR.
 - HORIZONTAL POSITIONING SYSTEM USED IS NAVSTAR GPS WITH U.S. COAST GUARD DIFFERENTIAL BEACON.
 - THE BATHYMETRIC INFORMATION SHOWN ON THIS DRAWING IS BASED ON SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME.
 - LOCATIONS OF PIER, DOCKS, SHORELINE AND OTHER PLANIMETRICS ARE APPROXIMATE IN NATURE AND ARE BASED ON MAPS PROVIDED BY THE PORT OF OAKLAND.
 - THE ESTIMATED DREDGE QUANTITIES INCLUDE A 20% ALLOWANCE FOR SLUSHING OF MATERIAL AND IMPROPER DREDGING OUTSIDE OF HIGH SPOT AREAS.

GBA GAHAGAN & BRYANT ASSOCIATES, INC.
ENGINEERS & SURVEYORS
33 Commercial Blvd., Suite A
Novato, CA 94949-9113
Phone (415) 883-7083



CAUTION
THIS PLAN MAY BE REDUCED
DO NOT SCALE
ORIGINAL SCALE

PLANS FIELD BOOKS

NO.	REVISIONS	DATE	APP'D	REV'D

REVIEWED	DATE	BY

DRAWN	DESIGNED	CHECKED	REVIEWED
BSG	JAO	BSG/RAD	

PORT OF OAKLAND
530 WATER ST. OAKLAND, CALIFORNIA

CHIEF ENGINEER
APPROVED: *H.A.P. Pym* 092609
RECOMMENDED: *C. J. ...*

BERTHS 32-33
DREDGE-OPS PLAN
SOUNDINGS OBTAINED: 08/03 & 06/09

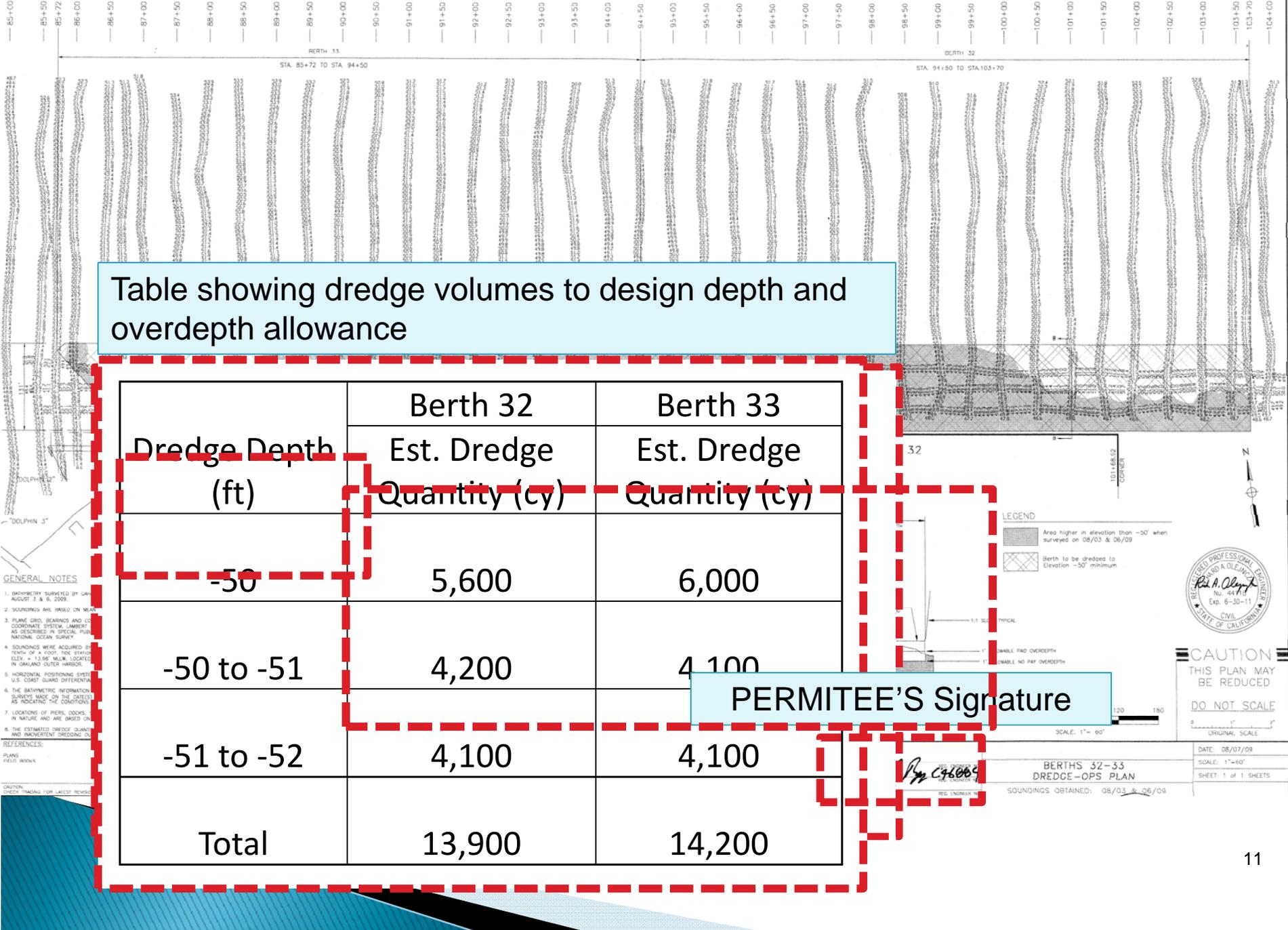
DATE: 08/07/09
SCALE: 1"=60'
SHEET: 1 of 1 SHEETS



Table showing dredge volumes to design depth and overdepth allowance

Dredge Depth (ft)	Berth 32	Berth 33
	Est. Dredge Quantity (cy)	Est. Dredge Quantity (cy)
-50	5,600	6,000
-50 to -51	4,200	4,100
-51 to -52	4,100	4,100
Total	13,900	14,200

PERMITEE'S Signature



GENERAL NOTES

- BATHYMETRY SURVEYED BY G&S ON AUGUST 3 & 6, 2009.
- SOUNDINGS ARE BASED ON MEAN LOW WATER.
- PLANE TABLE BEARINGS AND COORDINATE SYSTEM, UNLESS AS DESCRIBED IN SPECIAL PLAN NATIONAL OCEAN SURVEY.
- SOUNDINGS WERE ACQUIRED BY TOWNSHIP OF A 100' TIDE STATION ELEV. = 12.96' MEAN LOW WATER IN OAKLAND OUTER HARBOR.
- HORIZONTAL POSITIONING SYSTEM U.S. COAST SURVEY DIFFERENCE.
- THE BATHYMETRIC INFORMATION SURVEYED MADE ON THE DATE IS AS INDICATING THE CONDITIONS.
- LOCATIONS OF PIER, DOCK, IN NATURE AND ARE BASED ON PHOTOGRAPHIC RECORDING.
- THE ESTIMATED DREDGE QUANTITY AND UNDESIRABLE DREDGING IS.

REFERENCES:
PLANS
FIELD BOOKS

CAUTION: CHECK TRACKING FROM LATEST RECORDS

LEGEND

- Area higher in elevation than -50' when surveyed on 08/03 & 06/09
- Berth to be dredged to Elevation -50' minimum



CAUTION
THIS PLAN MAY BE REDUCED
DO NOT SCALE
ORIGINAL SCALE

SCALE: 1" = 60'
BERTHS 32-33
DREDGE-OPS PLAN
SOUNDINGS OBTAINED: 08/03 & 06/09

DATE: 08/07/09
SCALE: 1"=60'
SHEET: 1 of 1 SHEETS

Dredge Operation Plan

1. Permit number and dredge episode number
2. Description of work to be performed by contractor
3. Name & phone number of contractor rep. on site
4. Planned start and completion dates
5. Names/I.D. of vessels
6. I.D. of scows and scow capacity

Dredge Operation Plan

7. New work or maintenance
8. Discussion of the dredging procedures, including dredged material placement location
9. Design depth and overdepth (MLLW)
10. Quantity of material to be removed
11. Typical cross section, with design depth & overdepth
12. Date & design depth of last dredging episode



Solid Debris Management Plan

1. Permit number and episode number
2. Source and expected type of debris
3. Debris retrieval method
4. Debris disposal method and site
5. Schedule of disposal operations
6. Floating debris containment method

“Dredge Operation Plan”: Submittal

Submit between 60 and 20 days prior
to your planned start of work



Episode Approval & Start Notification

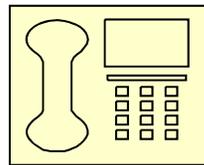
Permittee will receive written Episode Approvals from:

- USACE and BCDC, always
- RWQCB, in some cases

Permittee must submit “Notice of Commencement of Work” to USACE



Email



Phone or Fax



Carrier Pigeon

Questions?

