Southern California Dredged Material Management Team (SC-DMMT)
December 10, 2008
Meeting Minutes

I. Participating Agencies:

a. Allan Ota – EPA†
b. Mike Lyons – LARWQCB†
c. Bill Paznokas – DFG (San Diego) †
d. Jack Gregg/Larry Simon – CCC†[Δ]
e. Larry Smith/Ken Wong/Dan Swenson/Phuong Trinh – USACE

† Agency representatives participating via teleconference.
[Δ] CCC staff did not review the submittals due to short notice and so was not able to participate in the determinations below.

II. SAP/SAR & Suitability Determinations *

* All agencies concurred with the determinations below with the exception of CCC which will make its own determinations upon review of SAPs/SARs.

1. San Diego Channel
    a. Action Items
        i. Beach nourishment suitability determination
        ii. Increase dredge depth from 51+2 to 55+2.
    b. Determinations
        i. Sites 1,2,3,8,& 10 suitable for beach nourishment based on grain size and sediment chemistry. Sediment chemistry was insignificant for these coarse grain, beach compatible composites. Approximate volume is 110,000 CY based on 51+2 depth but may higher be if proposed depth changes to 55+2.
        ii. All other sites (5,6,11,12,13, & 14) will require full Tier III analysis before ocean disposal. Approximate volume 267,300 CY.
        iii. Outer Harbor (Zone 1): Based on past sampling data in the outer channel by the Navy, the proposed 4 foot increase is most likely coarse sand. Thus, additional dredge material from dredging to 55+2 approved for beach nourishment.

    c. Follow up Actions
        i. CCC staff and others requested documentation of the methods used to determine acceptable proportion of fine-grained sediments in dredged materials that are used for beach nourishment.

2. Alamitos Bay
    a. Action Item:
        i. Is material suitable for LA2?
    b. Determination

i. Dredged material from Basins 2 through 7 is suitable for disposal at LA-2. Based on data submitted for the Dec. 10, 2008 meeting, dredged material from Basin 1 is not suitable for ocean disposal. Suitability determination for Basin 1 could be revised upon receipt of additional sampling results providing higher resolution.

3. Rainbow Harbor SAP
    a. Action Item:
        i. Is SAP sufficient to proceed with testing?
    b. Determination: Approved with incorporation of following changes:
        i. Grain size analysis on individual samples (S1 thru S5) for beach nourishment suitability determination.
        ii. Full tier II and tier III testing for two composites: S1/S2/S3 and S4/S5
4. Ventura Keys
    a. Action Item:
        i. Is SAP sufficient to proceed with testing?
    b. Determinations: Approved with incorporation of following changes:
        i. Expand constituents in pesticide list (See Attachment A).
        ii. Subsamples of individual cores to be archived – if needed for higher resolution ("hotspot") analysis
        iii. Sample to be photographed in SAR
        iv. Summarize project description at the beginning of SAP
        v. On Plate 2 incorporate:
            1. Specify overdepth
            2. indicate contour depths
            3. label sampling points
            4. shaded relief of cut
            5. relocate sampling points to areas of deepest cuts
5. Ventura Harbor
    a. Action Item:
        i. Is SAP sufficient to proceed with testing?
    b. Determinations: Approved with incorporation of following changes:
        i. Incorporate changes i-v from Ventura Keys
        ii. Sample & analyze area B1 separately from the composite for Area B
        iii. Sample & analyze area C1 separately from the composite for Area C
        iv. Add 1 more sample to north end of Area B
        v. Account for overdepth in areas C1 and D
        vi. Provide background on B1 and C1
        vii. Areas for composite testing: A,B,C,&D
        viii. Areas for individual core testing C1 & B1

III. Other SC-DMMT Discussions

1. Future meetings to be scheduled on first Wednesday of each month from 10am-4pm in the Corps Los Angeles Office Planning Division Conference room.

2. Materials for future SC-DMMT meetings will be distributed 2 weeks in advance

3. Reference testing issue:

    a. Larry Smith requested clarification on a standard mentioned at last DMMT meeting by Allan Ota. 85% survival rate for the reference sediment for solid phase bioassays. Tests with a reference survival <85% would be considered invalid.
    b. Apparently, this standard has been adopted as part of a regional guidance document for Central and/or Northern California, but has not been reviewed by Corps staff in southern California. This standard may also be incorporated into the pending revision of the Ocean Testing Manual.
    c. Allan said that the reference site is supposed to be an unimpacted site, free of contaminants, reference sites are not formally designated and can be moved (applicant can pick other reference sites) in order to achieve the minimum 85% survival in order to reflect un-impacted conditions (i.e., ambient, or no dredged material present) that should be represented by a reference site sample.

4. Marina del Rey sand separation project:
    a. Jim Fields of the Corps Navigation Branch briefed the group on this project.
    b. The purpose is to test a process for allowing beneficial re-use of contaminated sediments
    c. Dredging to start 18 Dec, teleconf to be held on or around 23 Dec to discuss the sampling results after material is tested for contaminants
    d. Machine processes approx. 900 CY/day
    e. input is up to 15% solids (5-20% of solids being fines)
    f. output is < 5% solids, flocculent added to form sludge that is then separated
    g. extracted sand (45 micron and larger) to be discharged onto beach?

5. Dredging 101 refresher:
    a. Allan Ota proposed conducting a refresher dredging course
    b. topics would include sediment testing, disposal/suitability, beneficial reuse
    c. potential audience: non-governmental agencies, military?

6. Baseline issue: the term "baseline" was discussed in relation to differentiating inland vs. ocean waters as these classification relate to the 103 and 404 programs, offshore disposal site designation, etc. Allan Ota will research the issue and present more information at a future DMMT meeting.

Typical Bulk Sediment Chemical Constituents and Detection Limits

Important note - other parameters or contaminants of concern for particular regions or areas may be added by the Corps or EPA on a project-specific basis

Sediment Analyte	Analysis Method	Procedure	Sediment Target Detection Limits (Dry Weight)	ER-Ls	ER-Ms
Physical. Conventional Tests					
Grain Size (mm)	Plumb (1981)	Sieve/Pipette	0.10%		
Total Organic Carbon	EPA 9060A	Combustion IR	0.20%		
Total Solids	SM 2540G	Gravimetric	0.10%		
Volatile Solids	EPA 160.4	Gravimetric	0.10%		
Total Sulfides	SM 4500 S2-D	Titrametric	0.05 mg/L		
Dissolved Sulfides	SM 4500 S2-D	Titrametric	0.01mg/L		
Ammonia	SM 4500-NH3F	ICP-MS	0.01mg/L		
TRPH	EPA 418.1	IR Spectroscopy	0.1%		
Metals (mg/kg)					
Arsenic (As)	EPA 6020m	ICP-MS	0.025 mg/Kg	8,200	70,000
Cadmium (Cd)	EPA 6020m	ICP-MS	0.025 mg/Kg	1,200	9,600
Chromium (Cr)	EPA 6020m	ICP-MS	0.025 mg/Kg	81,000	370,000
Copper (Cu)	EPA 6020m	ICP-MS	0.025 mg/Kg	34,000	270,000
Lead (Pb)	EPA 6020m	ICP-MS	0.025 mg/Kg	46,700	218,000
Mercury (Hg)	EPA 245.7m	CVAFS	0.01 mg/Kg	150	710
Nickel (Ni)	EPA 6020m	ICP-MS	0.025 mg/Kg	20,900	51,600
Selenium (Se)	EPA 6020m	ICP-MS	0.025 mg/Kg		
Silver (Ag)	EPA 6020m	ICP-MS	0.025 mg/Kg	1,000	3,700
Zinc (Zn)	EPA 6020m	ICP-MS	0.025 mg/Kg	150,000	410,000
Organotins					
Monobutyltin	Krone 1989	GC/MS	1 ug/Kg		
Dibutyltin	Krone 1989	GC/MS	1 ug/Kg		
Tributyltin	Krone 1989	GC/MS	1 ug/Kg		
Tetrabutultin	Krone 1989	GC/MS	1 ug/Kg		
Semivolatile Organics	**(PAHs)**				
Bis(2-Ethylhexyl) Phthalate	EPA 8270	GC/MS SIM	10 ug/Kg		
Butylbenzyl Phthalate	EPA 8270	GC/MS SIM	10 ug/Kg		

Diethyl Phthalate	EPA 8270	GC/MS SIM	10 ug/Kg		
Dimethyl Phthalate	EPA 8270	GC/MS SIM	10 ug/Kg		
Di-n-butyl Phthalate	EPA 8270	GC/MS SIM	10 ug/Kg		
Di-n-octyl Phthalate	EPA 8270	GC/MS SIM	10 ug/Kg		
2,4-dichlorophenol	EPA 8270	GC/MS SIM	10 ug/Kg		
2,4-dimethylphenol	EPA 8270	GC/MS SIM	10 ug/Kg		
2,4-dinitrophenol	EPA 8270	GC/MS SIM	50 ug/Kg		
2-nitrophenol	EPA 8270	GC/MS SIM	10 ug/Kg		
4-nitrophenol	EPA 8270	GC/MS SIM	50 ug/Kg		
Pentachlorophenol	EPA 8270	GC/MS SIM	50 ug/Kg		
2-chlorophenol	EPA 8270	GC/MS SIM	10 ug/Kg		
4-chloro-3-methylphenol	EPA 8270	GC/MS SIM	10 ug/Kg		
2,4,6-trichlorophenol	EPA 8270	GC/MS SIM	10 ug/Kg		
4 Methylphenol	EPA 8270	GC/MS SIM	10 ug/Kg		
2 Methylphenol	EPA 8270	GC/MS SIM	10 ug/Kg		
2 Methyl 4,6 dinitrophenol	EPA 8270	GC/MS SIM	10 ug/Kg		
Biphenyl	EPA 8270	GC/MS SIM	10 ug/Kg		
1 Methylnapthalene	EPA 8270	GC/MS SIM	1 ug/Kg		
2,3,5 Trimethylnapthalene	EPA 8270	GC/MS SIM	1 ug/Kg		
2,6 Dimethylnapthalene	EPA 8270	GC/MS SIM	1 ug/Kg		
2 Methylnapthalene	EPA 8270	GC/MS SIM	1 ug/Kg	70	670
Acenapthylene	EPA 8270	GC/MS SIM	1 ug/Kg	44	640
Acenaphthene	EPA 8270	GC/MS SIM	1 ug/Kg	16	500
Anthracene	EPA 8270	GC/MS SIM	1 ug/Kg	85.3	1100
Benzo(a) anthracene	EPA 8270	GC/MS SIM	1 ug/Kg	261	1600
Dibenzo(a,h)anthracene	EPA 8270	GC/MS SIM	1 ug/Kg	63.4	260
Benzo(b)fluoranthene	EPA 8270	GC/MS SIM	1 ug/Kg		
Benzo(k)fluoranthene	EPA 8270	GC/MS SIM	1 ug/Kg		
Benzo (a) pyrene	EPA 8270	GC/MS SIM	1 ug/Kg	430	1600
Benzo (g,h,i) perylene	EPA 8270	GC/MS SIM	1 ug/Kg		
Chrysene	EPA 8270	GC/MS SIM	1 ug/Kg	384	2800
Fluoranthene	EPA 8270	GC/MS SIM	1 ug/Kg	600	5100
Fluorene	EPA 8270	GC/MS SIM	1 ug/Kg	19	540
Indeno(1,2,3-cd) pyrene	EPA 8270	GC/MS SIM	1 ug/Kg		
Phenanthrene	EPA 8270	GC/MS SIM	1 ug/Kg	240	1500
1 Methylphenanthrene	EPA 8270	GC/MS SIM	1 ug/Kg		
Pyrene	EPA 8270	GC/MS SIM	1 ug/Kg	665	2600
Benzo[e]pyrene	EPA 8270	GC/MS SIM	1 ug/Kg		
Perylene	EPA 8270	GC/MS SIM	10 ug/Kg		
Total PAHs	EPA 8270	GC/MS SIM	50ug/Kg	4022	44792
Pesticides					
Aldrin	EPA 8270m	GC/MS SIM	1 ug/Kg		
Chlorodane	EPA 8270m	GC/MS SIM	1 ug/Kg	0.5	6

4,4'-DDD	EPA 8270m	GC/MS SIM	1 ug/Kg		
4,4'-DDE	EPA 8270m	GC/MS SIM	1 ug/Kg		
4,4'-DDT	EPA 8270m	GC/MS SIM	1 ug/Kg		
2,4' DDD	EPA 8270m	GC/MS SIM	1 ug/Kg		
2,4 DDE	EPA 8270m	GC/MS SIM	1 ug/Kg		
2,4 DDT	EPA 8270m	GC/MS SIM	1 ug/Kg		
Total DDT	EPA 8270m	GC/MS SIM	1 ug/Kg	1.58	46.1
BHC-alpha	EPA 8270m	GC/MS SIM	1 ug/Kg		
BHC-beta	EPA 8270m	GC/MS SIM	1 ug/Kg		
BHC-delta	EPA 8270m	GC/MS SIM	1 ug/Kg		
BHC-gamma	EPA 8270m	GC/MS SIM	1 ug/Kg		
Chlordane-alpha	EPA 8270m	GC/MS SIM	1 ug/Kg		
Chlordane-gamma	EPA 8270m	GC/MS SIM	1 ug/Kg		
Cis-Nonachlor	EPA 8270m	GC/MS SIM	1 ug/Kg		
Dieldren	EPA 8270m	GC/MS SIM	1 ug/Kg	0.02	8
Endosulfan	EPA 8270m	GC/MS SIM	1 ug/Kg		
Endosulfan Sulfate	EPA 8270m	GC/MS SIM	1 ug/Kg		
Endosulfan-I	EPA 8270m	GC/MS SIM	1 ug/Kg		
Endosulfan-II	EPA 8270m	GC/MS SIM	1 ug/Kg		
Endrin	EPA 8270m	GC/MS SIM	1 ug/Kg		
Endrin Ketone	EPA 8270m	GC/MS SIM	1 ug/Kg		
Heptachlor	EPA 8270m	GC/MS SIM	1 ug/Kg		
Heptachlor Epoxide	EPA 8270m	GC/MS SIM	1 ug/Kg		
Methoxychlor	EPA 8270m	GC/MS SIM	1 ug/Kg		
Mirex	EPA 8270m	GC/MS SIM	1 ug/Kg		
Trans-nonachlor	EPA 8270m	GC/MS SIM	1 ug/Kg		
Toxaphene	EPA 8270m	GC/MS SIM	1 ug/Kg		
PCBs *					
Aroclor 1016	EPA 8270m	GC/MS SIM	10 ug/Kg		
Aroclor 1221	EPA 8270m	GC/MS SIM	10 ug/Kg		
Aroclor 1232	EPA 8270m	GC/MS SIM	10 ug/Kg		
Aroclor 1242	EPA 8270m	GC/MS SIM	10 ug/Kg		
Aroclor 1248	EPA 8270m	GC/MS SIM	10 ug/Kg		
Aroclor 1254	EPA 8270m	GC/MS SIM	10 ug/Kg		
Aroclor 1260	EPA 8270m	GC/MS SIM	10 ug/Kg		
Total PCBs	EPA 8270m	GC/MS SIM	10 ug/Kg	22.7	180

* Additional congeners may be added for higher resolution analysis of significant individual Aroclor values or significant Total PCB values