Southern California Dredged Material Management Team (SC-DMMT) January 27, 2010 Meeting Notes

I. Participating Agencies* / Attendees:

- a. Allan Ota/Jorine Campopiano/Brian Ross EPA†
- b. Mike Lyons LARWQCB
- c. Bill Paznokas DFG (San Diego) †
- d. Jack Gregg/Larry Simon CCC†
- e. Larry Smith/Ken Wong/Spencer MacNeil/Joe Ryan USACE

II. Project Review and Determinations $^{\Delta}$

- A. **CSTF Projects:** Projects listed below were discussed at the CSTF portion of the meeting. Agencies and individuals participating in the CSTF meeting and notes provided by Port of L.A. are found below (see Attachment A)
 - a. Al Larson Boat Shop
 - b. Former Southwest Marine Shipyard: Slip 240 Sampling
 - c. Former Southwest Marine Shipyard: Gambol Industries Project

B. Lower Newport Bay Maintenance Dredging

- a. **Project Proponents/PMs**: city of Newport Beach/Cori Farrar & USACE-Planning Div./Larry Smith
- b. **Purpose of Discussion**: suitability determination for disposal of dredged material at LA3
- c. **Background:** Project entails dredging of federal areas and non-federal areas in lower Newport Bay. The Sampling and Analysis Plan Results undergoing review are limited to the federal channels. Dredging depths would vary by location, and would range from -10 MLLW to -20 MLLW. Approximate volume to project depth ~ 915,463 cy (814,881 cy proposed for disposal at LA3). Approximate volume of 2 ft. overdepth ~723,076 cy (519,616 cy proposed for disposal at LA3). Project SAP initially funded by the city of Newport Beach. Cori Farrar (USACE-Regulatory Division) original PM. Project has received federal funding for maintenance dredging of federal channels. Therefore, in addition to Cori Farrar, Larry Smith (USACE-Planning Division) now involved with project. Reference April 29, 2009 SC-DMMT, and September 23, 2009 SC-DMMT meeting notes.

^{*} Participating agencies are composed of (1) core members that have permitting authority over dredging-related projects; (2) stakeholder agencies such California State Lands Commission, U.S. Fish and Wildlife Service, California Department of Fish and Game, and National Marine Fisheries Service.

[†] Agency representatives participating via teleconference.

Δ Decisions of the California Coastal Commission (CCC) are partly based on recommendations provided by its staff. Therefore, SC-DMMT determinations reflect the views of the CCC staff but not necessarily of the CCC.

d. **Discussion:** Per Corps: Hg concentrations ranged from 0.13 to 1.0 mg/kg with some isolated areas exceeding 1.0 mg/kg: western tip of WLB, eastern end of BC, western portion of LIN & LIS, and two areas within YAM-L. Hg is present in metallic form, not methylated. Hg historically present due to historical mining activities nearby. Composites passed all OTM evaluation criteria, including suspended phase and solid phase bioassay tests as well as bioaccumulation tests (Attachment B). Hg tissue concentrations below deepwater TTL, and steady-state DDx concentrations below 280 ug/kg threshold. Thus, disposal at LA3 would be suitable for all composites. Per EPA: bioassay results based on composites, however Hg range of individual cores may exceed composites. Per CCC: need more information on the form of Hg at the project site, more information on the source of the Hg (e.g., what is the evidence that the mercury is "due to historical mining activities") and potential transformation of metallic Hg to organic forms at LA3.

e. Determination:

- i. No determinations suitability determinations made at this time.
- ii. Corps to investigate whether POLB Middle Harbor would accept dredged material surrounding highest Hg cores.
- iii. Continue discussion during March SC-DMMT meeting.

III. DMMT only discussion

A. Jack Gregg requested that materials to be reviewed and discussed at future SC-DMMT meetings be posted on Corps ftp site. Ken to investigate whether materials can be posted on SC-DMMT web site.

B. SAP template: EPA has submitted a draft table of contents and draft data tables. Ken to review and incorporate into draft SAP template.

Los Angeles Region Contaminated Sediments Task Force

Port of Los Angeles Projects: Al Larson Boat Shop, Former Southwest Marine Shipyard Berth 240 Slip Sediment Sampling, and Gambol Industries Alternative Proposal at Former Southwest Marine Shipyard

Meeting Minutes from January 27, 2010

Attendees:

Efrem Neuwirth - DTSC

Joe Cully - DTSC

Kathryn Curtis – POLA

Ken Wong – USACE

Larry Smith – USACE

Spencer MacNeil -USACE

Michael Lyons - LARWQCB

Wendy Hovel – Weston Solutions

Andrew Martin – Weston Solutions

Susie Santilena – Heal the Bay

Ken Ragland - POLA

Jana Sidley – POLA

Michael Christensen - POLA

Dave Walsh - POLA

John Foxworthy – POLA

Larry Simon – CA Coastal Commission

Jack Gregg – CA Coastal Commission

Allen Ota – USEPA

Stacey Jones - Halcrow

Josh Burnam - Anchor OEA

Bill Paznokas – CA Dept of Fish and Game

Tim Bazley, Blue Water Design Group

John Bridwell, Gambol Industries

Jeff Mallian, Gambol Industries

Gwen Butterfield, Butterfield Communications

Ken Ehrlich, Jeffer Mangels

Rod Wilson, PRSI

Jenny Chavez, Councilwoman Hahn's office

Meeting Minutes:

Al Larson Boat Shop

Stacey Jones (Halcrow) gave an overview of the Al Larson Boat Shop (ALBS) project. She indicated that Al Larson is undergoing a lease renewal process. They want to modernize the facility as part of this process. The modernization would include a travel lift for vessel repair, an approach channel and beneficial use of material in a slip fill. The work is to be done in phases.

Michael Lyons asked how long it would take to get the project done.

Ms. Jones indicated that it would be done in phases with the first phase taking approximately 1 year to complete and the entire program approximately 5 years to complete, but that it depends on how much each phase costs.

Ms. Jones indicated that Phase I would involve removal of approximately 3,000 cy of dredged material, construction of a new wharf face with fill behind it, creating a confined disposal facility (CDF). Phase II would involve dredging part of the parcel to -22 ft + 2 ft overdredge depth, demolition of finger piers for approximate removal of 16,000 cy of dredged material. Ms. Jones discussed the existing elevations, explained the figures of cross sections of the fill area, and of the sheet pile wall, sloping away from the water, for draining purposes.

Allan Ota from USEPA as if there would be shallower areas that would impede their ability to get into the slip. Ms. Jones said no, and Larry Smith indicated that the channel leads into the slip so the depths should be ok.

Josh Burnam then continued on with the presentation. He stated that there had been previous sediment characterization studies conducted at ALBS that indicated that the material was contaminated and that it is also known from previous sampling that additional contamination exists throughout Fish Harbor. Mr. Burnam noted that the ALBS design team followed the CSTF decision tree to determine options for disposal of the contaminated sediments to be dredged at the site. ALBS is proposing to cement stabilize (thereby binding soluble contaminants) on site and reuse the material in the fill. A bench scale project would be done prior to the project to evaluate binding as part of this cement stabilization process. The material would be placed behind sheet piles and the joints of the walls would be sealed. The surface of the fill would then be paved over. During the dredging process, silt curtains or other structures would be used to prevent impairment of water quality.

Mr. Lyons asked if there was concern about the fact that the sediment testing conducted at the site was done in 2005 (beyond the typical 3 year window). Mr. Burnam indicated that he had discussed this with Spencer MacNeil and that they were not concerned because the material

would still be contaminated and the proposed fill would be accommodating some of the contamination.

Mr. MacNeil then asked if using silt curtains during dredging would reduce water quality exceedances. Mr. Burnam said yes, particularly because the material is quite a bit sandier than expected.

Larry Simon asked if cement stabilization has been used on other projects to be sure there is not leaching. Mr. Burnam said yes – that it had been used on a San Diego Bay project and that there are other project examples of its effectiveness.

Mr. Simon said he would like to see these examples because when the project goes to the Commission for review, the effectiveness of the process will be questioned. Mr. Burnam agreed to provide this information.

Mike Christensen then asked if Mr. Burnam knew the cement ratio that would be needed. Mr. Burnam did not but said that they will optimize this ratio on site and confirm it on a bench scale. Mr. Christiansen then asked if the plan was to do an "in barge mix" and Mr. Burnam said yes.

Susie Santilena asked Ms. Jones to explain the construction of the sheet pile wall. Ms. Jones said that the following would be done:

- Deck will be removed
- Piles will be driven
- CDF will be placed in layers
- Tiebacks will support lateral movement of sheet pile wall
- Fill will be placed
- A rock base will be constructed.

Mr. Lyons asked about the CEQA status of the project and Kathryn Curtis said that an EIR was currently in preparation for this project. She noted that two of the buildings on site are historical so the CEQA is tie for that reason. Also, Ms. Curtis mentioned that internal Port staff discussion is ongoing regarding the contamination throughout Fish Harbor.

Mr. Lyons mentioned that the permit application was submitted to him already but that he couldn't act on it yet since the CEQA process isn't complete.

Ms. Jones stated that although there may be a long-term plan for the overall Fish Harbor area, ALBS needed to move forward with this project and not get tied up with that long-term process.

Ms. Curtis asked if this was it for CSTF involvement in this process. The general response was that the project could move through its normal permitting process following the CEQA review.

Mr. Ota asked what we know about the approach channel area. Mr. Burnam said that since the larger Fish Harbor area is not being remediated at this time, the newly dredged sediment at ALBS could get recontaminated from the rest of the harbor, recontaminating the surface of the approach channel area.

Ms. Jones said that it was not likely that there would be a tremendous amount of in fill (sedimentation) in this area, so that recontamination would be minimized. Mr. Burnam added that the material is fairly sandy, so less likely to be stirred up.

Mr. Simon said that the project would not make the situation in Fish Harbor worse, but would incrementally make it better.

Mr. MacNeil said that when the historical building coordination was completed, a provisional COE permit could be provided for the project.

Mr. Simon said that it would be helpful for the Coastal Commission if the CEQA process and State Historic Preservation Office (SHPO) issues were resolved and completed prior to the Port Master Plan Amendment being submitted.

Ken Wong concluded the discussion by noting that no additional testing would be needed.

Former Southwest Marine Leasehold Area - Berth 240 Sediment Sampling and Analysis

Kathryn Curtis introduced the project with a brief overview of activities to date, stating that previous landside and sediment testing had been conducted by the Port in and adjacent to the former Southwest Marine Shipyard (SWM) leasehold area. Ms. Curtis reminded the group that DTSC, who has oversight on the landside contamination at SWM, had requested that the Port conduct an ecological risk assessment on the land and water areas of the former SWM facility, which necessitated additional sediment sampling to further evaluate the nexus between the land and water side contamination. This DTSC request resulted in development of a Draft Sediment SAP, which was initially presented to the CSTF in September of 2009.

At the time the initial SAP was developed, POLA was moving forward with the Channel Deepening project, which has been approved to fill both dry dock slips at the SWM site, so additional testing in that area (Parcel 4) was deemed unnecessary. Therefore, the focus of the SAP was on the sediments along the Berth 240 wharf. Since that time, an alternative land use proposal has been submitted to the Port by Gambol Industries, which includes a partial fill of one of the dry dock slips and utilization of the site as a shipyard. Ms. Curtis noted that, should the Gambol proposal move forward, additional evaluation of sediments in Parcel 4 will likely be necessary.

At the CSTF meeting in September of 2009, there were concerns raised about the sample density and spatial coverage of the sampling locations in the Berth 240 Slip area. Also there were concerns raised about the need to sample for sediment quality objective (SQO) assessments and/or an ecological risk assessment. Ms. Curtis indicated that there was confusion remaining after the September CSTF meeting regarding how to move forward with the sampling and whether DTSC would continue to take the lead. Also, the Port was concerned about resolving the direction from the two state agencies (DTSC and the Regional Board). Ms. Curtis asked Michael Lyons to discuss what came about when DTSC and the Regional Board met to discuss the project per the Port's request.

Mr. Lyons said that the Regional Board wants DTSC to be the lead on the sediment evaluation at SWM (due to the landside nexus) but that DTSC agreed to coordinate the process through the CSTF. He said that the Regional Board is interested in using SQO assessment as part of this project.

Efrem Neuwirth (DTSC) then indicated that DTSC typically uses the ecological risk assessment approach but that in this case, is willing to look at the application of the SQO approach.

Ms. Curtis then indicated that the intent of today's CSTF meeting was to brainstorm about a revised approach to sampling and analysis in the Berth 240 Slip area. She stated that POLA wants the sampling strategy to satisfy all interested parties and that this investigation's goal was to more fully characterize the Berth 240 Slip sediments to determine what future actions may be necessary. Ms. Curtis asked Wendy Hovel to continue with the specifics of the sampling strategy.

Wendy Hovel stated that the focus of the discussion today was on the main portion of the Berth 240 Slip. She noted that proposed additional sampling in the areas immediately adjacent to the landside, along the wharf face, were discussed in detail at the last meeting and no concerns had been raised, so the sampling strategy in those areas would not change in the SAP.

Ms. Hovel then explained that sample density/placement in the Berth 240 slip had been further evaluated since the September CSTF meeting using the EPA-recommended software called Visual Sampling Plan (VSP). This is a program that allows you to statistically determine the appropriate number of samples required to detect a hot spot in an area of a specified size. She said that prior to using this program it was necessary to determine the size of the area to be sampled. The area recently dredged (at Berth 240B), the two floating docks adjacent to Berth 240B, and the area immediately along the wharf face in which large numbers of samples have already been collected were excluded. The remaining area was determined to be approximately 512,000 sq ft (57,000 sq yds). Using the VSP, a range of sample sizes were determined by

varying the probabilities of hitting a hot spot in the Slip 240 area, based on different sized hotspots (5, 7.5, and 10% of the Slip 240 Area). It was assumed that the shape of the sampling grid would be triangular (typically used grid recommended by Weston statistician), the samples would be collected by vibracore, and that the hot spot would be circular in shape. Ms. Hovel presented the results (via handout) of the VSP evaluation, in both table output and on site maps. She said that the map entitled "samplesizeresults_95%_7.5%" indicates that there is a 95% chance of detecting a hotspot representing 7.5% of the area in slip 240, if 14 samples are taken using a systematic triangular grid sampling design. A second map entitled "samplesizeresults_95%_5%", indicates that there is a 95% chance of detecting a hotspot representing 5% of the area in slip 240, if 21 samples are taken using a systematic triangular grid sampling design.

Mr. MacNeil asked why 5% and 7.5% were chosen as representative sizes for hot spots. Ms. Curtis said that there is no established threshold for this evaluation and Ms. Hovel added that these results show reasonable spatial coverage given cost constraints associated with sampling both along the wharf and throughout the entire slip. Ms. Hovel said that in addition to this VSP exercise, previous interpolations/kriging on historical data, including that along the wharf face, also indicates that a certain spatial distribution of samples is needed, with sample numbers along the lines of 14 - 20, to characterize an area of this size.

Mr. Ota stated that is important to overlay the bathymetry and to focus on hot spots where there is shoaling. Ms. Curtis said that this is not a dredged material evaluation plan where we have an established boundary of dredging proposed, but rather a sediment investigation requested by DTSC to determine if additional action is needed.

Mr. Ota indicated that if in the future dredging was required, additional testing might be needed.

Larry Smith said that he agreed with moving the sampling locations to high spots.

Mr. Ota asked how sampling would be done, and Ms. Hovel indicated it would be done by vibracore. Analysis would be done using a phased approach; samples would be collected to 15 ft but analyzed in two ft increments until a relatively non-contaminated horizon was found.

Mr. Lyons said that he would like to see the application of SQOs to evaluate the sediment, in which case grab samples would be needed.

Mr. Neuwirth said that he was sure the rigid station placement would be the best design for interpolation at the end.

Ms. Hovel said that station positions would need to be tweaked to address bathymetry and logistical issues but that the main concern at the moment was the appropriate sample number and relative sample coverage of the area.

Mr. Lyons agreed that 21 samples was better than 14 but expressed concern about the arbitrary boundary and whether additional sampling should occur between the main channel previous dredging area and the edge of the Berth 240 slip. Ms. Santilena also said that she would like to see the boundary of the project area extend to the historical dredging footprint in the main channel. Ms. Curtis indicated that this was an iterative process, and that the boundary could be shifted to cover that area.

Mr. Lyons asked about the landside contamination, and Mr. Ken Ragland (POLA) used the SAP from September (Figure 3) to indicate to Mr. Lyons where landside contamination had been found.

Mr. Lyons suggested concentrating stations in conjunction with landside inputs, and Ms. Hovel explained that the Sept. 2009 SAP already addresses this and showed Mr. Lyons from previous maps in the SAP how there were concentrated samples need storm drains and under the wharf.

Ms. Hovel suggested that if the Port could get buy off on sample number, then they could reevaluate sample locations based on logistics, bathymetry, and within the extended area and possibly relocate some sample locations accordingly.

Mr. Lyons and Mr. Ota said that they preferred the 21 sample scenario.

Mr. Lyons asked how it was determined (as part of the phased approach) whether additional chemistry would be performed on deeper horizons. Ms. Hovel indicated that this was done using the ER-M (exceedances of) as a guideline (per the SAP). Mr. Lyons and Ms. Santilena indicated that they preferred the ER-L.

Ms. Santilena asked if interpolation would be used to determine the extent of dredging if dredging was required, and Ms. Curtis said yes.

Mr. Ota suggested doing quick turn chemistry then initiating tests for dredging disposal options if warranted. Ms. Curtis indicated that it was premature to do testing for dredging purposes and this should be viewed as a screening level assessment rather than the more proscribed Green book testing prior to dredging.

Mr. Lyons said that screening using vibracore sampling/chemistry wasn't enough, and that SQOs needed to be done to evaluate surface contamination. He suggested doing SQOs on at least half

the stations. Mr. Neuwirth indicated that he was ok with doing SQOs. Ms. Hovel said that guidance from SCCWRP indicated that approximate 5 samples should be done for an area of approximately 500 acres, and that this Berth 240 Slip site was approximately 11 acres. She provided Mr. Lyons the material she had obtained from SCCWRP that looks at this. Mr. Lyons said he still thought that SQOs should be done on at least half of the stations. Mr. Lyons agreed that a comparative approach could be used to infer the SQO assessment at the remaining stations where chemistry only had been done.

Ms. Curtis said in summary that the sample stations identified by the VSP process will be evaluated and potentially tweaked based on bathymetry (shoaling, etc), previous sampling, and logistics.

Mr. Wong summarized by stating that the 21-sample scenario would be applied to the SAP, locations would be tweaked per what Ms. Curtis stated above, the boundary of the project area would be extended to the Channel Deepening dredge footprint, and that there should be an explanation in the SAP about the approach for developing the appropriate number of samples.

<u>Gambol Industries – Alternative Berth 243 Design Proposal</u>

Mike Christensen introduced the project and indicated that the Channel Deepening SEIR/SEIS has been approved and a CDF at Berth 243 (Parcel 4) has been permitted, which would encompass both existing dry dock slips. Subsequently, Gambol Industries has developed an alternative CDF design for the dry dock slips that would accommodate their proposed future use of the SWM site as a shipyard and boat repair facility. The Board of Harbor Commissioners requested that POLA staff work with Gambol Industries to evaluate their alternative.

Tim Bazley presented an overview of the alternative design. He indicated that they wanted to maximize the open water area by only filling a portion of one of the slips. John Bridwell pointed out that Gambol Industries' proposed future use of the dry dock slips and surrounding land area was for shipyard and boat repair activities. Mr. Bazley explained that the project would involve a vertical containment wall using a steel sheet pile with an open cell system. He indicated that maintenance dredging would be conducted to the previous design depth in the dry dock slips and material would go in the CDF created.

Mr. Lyons asked if the containment wall would be above the water line, and Mr. Bazley said yes.

Mr. Smith asked if the CDF would still contain 190k cy of material from Channel Deepening dredging, and Mr. Bazley said yes.

Mr. Simon asked if these structures have been used for sequestering contaminated material previously. Mr. Bazley said this design was recently used in Alaska in tidally influenced areas and they have not detected water exchange through the structures. However, the Alaska project did not involve containment of contaminated sediments.

Mr. Simon indicated that the Coastal Commission would need to see rigorous documentation demonstrating the effectiveness of this type of containment for contaminated material.

Mr. MacNeil asked about the life expectancy of the containment structure, and Mr. Bazley said 50 years – same time frame as the rock dike proposed for the Channel Deepening Project CDF.

Mr. MacNeil asked for clarification on the volume of material and associated placement. Mr. Christensen indicated that they needed to stay within the bounds of the permit so that no additional material would go to LA-2.

Mr. MacNeil said that if the design was within the original permit restrictions this was acceptable but that additional information on the structure to be used is requested, including its ability to prevent leaching of contaminants and its life expectancy. *Please see Attachment B for additional clarifications provided by Mr. MacNeil*.

Mr. Christensen requested agency input on the steps and timing of the regulatory process if the Gambol Industries alternative were to move forward, but stated that he didn't necessarily expect the input at today's meeting since this was scheduled as an information item only.

Mr. Simon indicated that the Al Padilla in the local Coastal Commission office should be contacted to see if another Port Master Plan Amendment would be needed in conjunction with the Gambol alternative design and use of the site.

Ms. Santilena said that Heal the Bay would like to see the information on the effectiveness of the proposed containment structure.

Mr. Ota said that his main concern was that the Channel Deepening Project full slip fill accommodated a certain volume of contaminated material and that the proposed alternative fill scenario needed to as well. As long as this is still the least adverse option he would be okay with moving forward but would like to have more details on the project design.

Ms. Santilena said that Heal the Bay does not want to see any additional ocean disposal and recommends beneficial use only.

Attachment B: Spencer MacNeil's Clarifications for Comments Concerning Gambol Industries' Berth 243 Project.

Wong, Kenneth SPL

From: Macneil, Spencer D SPL

Sent: Thursday, February 04, 2010 10:42 AM

To: 'Curtis, Kathryn' Cc: Wong, Kenneth SPL

Subject: RE: CSTF/SC-DMMT list of attendees

Kathryn,

I looked over the Gambol Industries portion because I said something during the meeting that was not completely accurate. The meeting notes, fortunately, were not specific on the point I did not get correct. While the project would probably be acceptable if they work within the permit restrictions and the structure maintains integrity (does not leak or fall apart) over the long term (at least 50 years), they would still need to obtain a modification to the Corps permit. It isn't Section 404 of the Clean Water Act that would trigger the modification (because less area would be filled); it is Section 10 of the River and Harbor Act, which addresses all work and structures in navigable waters of the U.S. With respect to Section 10, the permit needs to address specifically what would occur; so a change in approach (work or structure) would require a modification to the Corps permit. Depending on the specifics of the activities and structural integrity, it could be more of a formality/paper exchange, but I just wanted to point out that I was not as accurate as I should have been in discussing the regulatory requirements.

Thanks,

Spencer

Spencer D. MacNeil, D.Env. Senior Project Manager

Sellior Project Manager

U.S. Army Corps of Engineers, Los Angeles District Regulatory Division

2151 Alessandro Drive, Suite 110

Ventura, California 93001

(805) 585-2152

(805) 585-2154 (facsimile)

----Original Message----

From: Curtis, Kathryn [mailto:KCurtis@portla.org]

Sent: Thursday, February 04, 2010 10:29 AM

To: Wong, Kenneth SPL

Cc: Jack Gregg; Michael Lyons; Macneil, Spencer D SPL; 'Hovel (Rose), Wendy'; Walsh, Dave;

Ragland, Ken

Subject: RE: CSTF/SC-DMMT list of attendees

Ken, attached are our draft CSTF meeting notes for the three POLA projects discussed at the January meeting. Can you please let me know if you receive any comments on these notes after you distribute them, as I'd like to participate in any changes made. Thanks very much. Please call if questions.

----Original Message----

From: Wong, Kenneth SPL [mailto:Kenneth.Wong@usace.army.mil]

Sent: Friday, January 29, 2010 4:02 PM

To: Curtis, Kathryn

Cc: Jack Gregg

Subject: CSTF/SC-DMMT list of attendees

Hi Kathryn -

Please see attached. I'll have a formal sign-in sheet next time the CSFT meets w/ SC-DMMT. Also when can I expect to receive the CSTF portion of the notes?