DREDGED MATERIAL MANAGEMENT OFFICE

DREDGED MATERIAL MANAGEMENT OFFICE (DMMO) ANNUAL REPORT

January 1, 2001 through December 31, 2001

March 2002

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I. INTRODUCTION

The Pilot Program of the multi-agency Dredged Material Management Office (DMMO) was established to foster a comprehensive and consolidated approach to handling dredged material management issues to reduce redundancy and delays in the processing of dredging permit applications, while ensuring environmental protection. The DMMO, in part, grew out of the Long Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region (LTMS), which was started in 1990.

In 1995, the LTMS agencies formed a pilot DMMO, under existing authorities and budgets. The DMMO member agencies are the US Environmental Protection Agency, Region IX (EPA), the US Army Corps of Engineers, San Francisco District (USACE), the San Francisco Bay Regional Water Quality Control Board (RWQCB), the San Francisco Bay Conservation and Development Commission (BCDC), and the California State Lands Commission (SLC). The USACE acts as the "host" of the DMMO and takes on responsibilities associated with this role. The California Department of Fish and Game (CDFG) and the National Marine Fisheries Service (NMFS) actively participate in the DMMO as commenting resource agencies.

The roles, responsibilities and jurisdictions of the DMMO agencies differ, depending primarily on the proposed dredged material disposal or reuse site. As a result, member agencies may play only an advisory role in certain aspects of the permitting process. Decisions made by the DMMO do not in any way supersede the primary roles of the permitting agencies, which remain free to accept or reject recommendations from commenters, including the DMMO staff. In practice, however, the discussions at the DMMO meetings help inform the primary permitting agencies of specific concerns and issues of the member agencies, often before finalization of project documents. This encourages and facilitates necessary project modifications at an early stage in project planning when such changes are more easily and economically accomplished.

The DMMO facilitates the processing of dredging permit applications within existing laws, regulations and policies. It was specifically designed to provide a mechanism for consistent review of permit applications through coordinated efforts by DMMO member agencies. It also provides a mechanism to allow the involvement and participation of permit applicants and interested parties during the application process. No new regulatory statutes were initiated in the formation of the pilot DMMO. All applicable regulatory authority and processes of the member agencies remain in full force and effect. The DMMO meetings are typically held twice monthly at the USACE offices in San Francisco and are open to public participation.

The geographic area of the DMMO includes all of the San Francisco Bay Estuary up to Sherman Island, its major tributaries to the point where navigation is no longer feasible, upland areas surrounding the estuary, and the ocean disposal site designated by the EPA (the San Francisco Deep Ocean Disposal Site, or SF-DODS).

The member agencies are also committed to coordination with the pertinent resource agencies (CDFG, NMFS, and U.S. Fish and Wildlife Service), the Central Valley Regional Water Quality Control Board (regarding reuse of Bay dredged material in the Sacramento-San Joaquin Delta region) and the California Coastal Commission (regarding ocean disposal of dredged material). In addition to posting meeting schedules and agendas on the DMMO Web site at http://www.spn.usace.army.mil/conops/dmmo.htm, the USACE sends electronic copies of these items to members of all these agencies.

The DMMO has been meeting since 1996. Procedures for its operation are documented in a Memorandum of Understanding signed by the DMMO agencies and in formal General Operating Principles (available on the DMMO Web site). These procedures include publication of annual progress reports and annual public meetings. This report covers the period from January 1, 2001 through December 31, 2001. The annual meeting to discuss activities and other topics of the DMMO is scheduled for March 28, 2002.

II. ACCOMPLISHMENTS

During 2001, the DMMO continued to accomplish the goals and objectives set forth in the 1995 General Operating Principles. The DMMO continued review of dredging project proposals, preparation of guidance documents, maintained the DMMO Web site, took part in a number of working groups relevant to the DMMO efforts, and continued staff education activities. These efforts are described below.

A. PROJECT REVIEW

The DMMO discussed 73 projects during the year (see Appendix A for details on the projects considered). Of those, the DMMO made final recommendations on 46 projects proposing a total of approximately 3.2 million cubic yards of dredging. Table 1 provides summary information on projects for which the DMMO completed review in 2001.

Table 1. Volume proposed for dredging by projects for which DMMO made final recommendations during calendar year 2001.

	Volume proposed for disposal	
	cubic yards	*% of total volume*
By Proposed Disposal Location		
In-Bay	1,960,550	60
Beneficial Reuse	395,000	12
Ocean	866,400	26
By Suitability Determination		
Suitable for unconfined aquatic disposal	2,840,150	86
Unsuitable for unconfined aquatic disposal	449,800	14
Total	3,289,950	

Over half of the material from reviewed projects was proposed for in-Bay disposal. Approximately one-quarter of the material was proposed for ocean disposal and comes from just two USACE projects: maintenance dredging of Oakland Harbor and maintenance dredging of Richmond Inner Harbor. The remaining material, 12%, was proposed for beneficial reuse at various locations, including drying ponds (with later reuse as construction fill or for levee maintenance), landfills (for daily cover) and Winter Island (for levee maintenance). This pattern is very similar to that for projects reviewed during 2000.

In 2001, as in 2000, a higher proportion of material was determined to be unsuitable for unconfined aquatic disposal than in previous years. This year, 14% of material fell into this category, while historically this value has been below 5%. The unsuitable material was all from maintenance dredging projects, most of it from projects (Bahia Lagoon, Sausalito Marine Properties, and Kiewit Pacific Companies) that have not been dredged in many years. There is no indication that this apparent increase in the amount of material unsuitable for unconfined

aquatic disposal reflects an overall trend in the quality of Bay sediments. The DMMO agencies will continue to report on results of suitability determinations in future Annual Reports, and will investigate further should long-term trends in dredged material quality appear to change.

The volumes in the table above are proposed only, and the actual amounts and timing of dredging will depend on several factors. The DMMO process is just a portion of the permitting process for dredging. After obtaining a suitability recommendation on sediment quality from the DMMO, project proponents must obtain authorizations from appropriate regulatory agencies, secure funding, and arrange for a dredging contractor to perform the work. All these steps can take weeks to years. Therefore, these numbers cannot be used to predict, for example, that in-Bay disposal in 2002 will be 2 million cubic yards. For some of the projects in Table 1, dredging was completed in 2001. For other projects, dredging may not occur for some time.

B. DREDGING AND DISPOSAL VOLUMES FOR 2001

The USACE tracks actual dredging and disposal volumes, and provides quarterly reports of these volumes to the other DMMO agencies. The complete annual report of disposal volumes is available from USACE. Table 2 summarizes the actual dredging and disposal volumes for calendar year 2001 (Appendix B contains more detailed information for calendar year 2001 dredging and disposal). Approximately 3.6 million cubic yards of material were disposed of during the year. Of this volume, 56% went to in-Bay disposal, 16% was disposed of at the deep ocean disposal site (SF-DODS), and 28% was used for beneficial reuse. The beneficial reuse numbers are dominated by the Port of Oakland's Berths 55-58 deepening project; as part of this new work project, about 740,000 cubic yards of material were used to provide fill material (beneficial reuse) for reconfiguration of the Port's Middle Harbor area. The LTMS policies encouraging that alternatives to in-Bay disposal be found for new work and USACE projects appear to be succeeding in diverting material from in-Bay disposal. The total amount of in-Bay disposal in 2001 was below the LTMS target of 2.3 million cubic yards per year during the first transition phase.

Table 2. Dredged material disposal during calendar year 2001.

	All Dredging		Maintenance Dredging		New Work	
Disposal Type	*cubic yards*	*%*	*cubic yards*	*%*	*cubic yards*	*%*
In-Bay	2,041,936	56	2,041,936	54	0	0
Ocean	566,679	16	566,679	44	0	0
Beneficial reuse	1,028,256	28	287,126	2	741,130	100
Total	3,636,871		2,895,741		741,130	

C. LOCAL INLAND TESTING MANUAL GUIDANCE

The DMMO agencies issued draft guidance for implementing the Inland Testing Manual (ITM) locally via PN 99-3 in July 1999. We received numerous comments and have modified the local guidance, where appropriate, to respond to commenters' suggestions. The final guidance was published on October 26, 2001 (PN 01-01), and is now referred to as "Guidelines for Implementing the Inland Testing Manual in the San Francisco Bay Region" or "the ITM Guidelines." The ITM Guidelines will assist dredgers and project proponents with the ITM use in the Bay area.

D. DMMO WEB SITE

The DMMO Web site (www.spn.usace.army.mil/conops/dmmo.htm), initiated in June 1998, continues to be maintained and updated by the USACE. The Web site provides access to:

- DMMO meeting schedules and agendas
- DMMO MOU and Operating Principles
- DMMO Annual Reports
- DMMO Newsletters
- Dredging Permit Consolidated Application Form and Instructions
- Local and federal guidance for sediment testing and dredged material management
- Links to the LTMS EIS/EIR and Management Plan
- Meeting schedules and agendas for LTMS public workshops and workgroup meetings
- Links to DMMO member agency Web sites

E. WEB VERSION OF DMMO APPLICATION

The DMMO is designing a web based version of the Dredging Permit Consolidated Application Form. The intention is to allow applicants to type directly into the web form and submit it electronically. Currently the application is only available in hard copy or as a portable document file (pdf) that be downloaded from the DMMO web site and printed, but not filled in electronically. A "beta" version will be sent to a volunteer subset of project proponents and consultants for their use and comments. After addressing any comments, the DMMO will finalize the web form that we expect to make available to applicants and their contractors at the DMMO Web site. It was anticipated in the 1999 Annual Report, that an electronic application form would be released in 2000, but due to other priorities and redirection from an electronic to web version, the release has been delayed.

F. LTMS MANAGEMENT PLAN PARTICIPATION

DMMO members have played an active role in developing, preparing for and participating in all the LTMS public workshops. Several of the DMMO staff have also been involved in writing and reviewing the Management Plan document and preparing for and participation in LTMS Management Committee meetings. Some DMMO staff also actively participate in the LTMS mid-level policy group.

Because DMMO members have participated in all aspects of the Management Plan development, other DMMO priorities (e.g., finalization of SAP guidance documents) have been delayed. The draft LTMS Management Plan was published in June 2000. The final version was released in January 2002.

G. ALCATRAZ ENVIRONS SAMPLING

In 2001, the DMMO modified the procedures for sampling and testing the Alcatraz Environs reference stations. Two of the six stations (R-AM-B and R-AM-F) were eliminated from the sampling and testing scheme. Also, instead of taking a composite, applicants sampling the Alcatraz Environs for reference testing will take a single station sample. The stations are rotated in sequential order.

This change was based on feedback from firms performing sampling at the Alcatraz Environs and the DMMO's investigation of anomalous test results obtained from Alcatraz Environs composite samples. For several years, those sampling the Alcatraz Environs stations have

complained about the safety problems associated with station R-AM-B. This station is located relatively close to the island and subject to rough wave patterns because of wave bounce off the island. Additionally, the samples from this station were generally being rejected for inclusion in the composite because they were composed of relatively large sized particles, falling in the gravel to cobble range. Given the safety concerns and the unsuitable grain size of material from this station, we decided to drop it from inclusion in the sampling scheme.

Occasionally, tests of Alcatraz Environs composite samples would result in abnormal (in comparison to the large majority of test results) values for PCBs or PAHs. When firms sampling the Environs were queried if they noticed any differences in the material in different sampling events, they mentioned that many times station R-AM-F produced what looked like old construction material, pieces of brick, concrete, etc. Based on this anecdotal evidence the DMMO investigated historical records of the area and discovered that an area within 100 yards of the R-AM-F sampling station had previously been designated (prior to 1972) as a general dump site. This dump site was not restricted, and almost any type of material could be disposed. Because of this, we removed this station from the sampling scheme.

Rather than compositing the remaining stations, individual stations will be sampled sequentially by applicants. The data, over time, from each of the stations, will allow the DMMO to determine if the anomalies are consistently coming from a single station or are random.

H. 2001 ANNUAL MEETING

On April 22, 2001, the DMMO held its 2001 Annual Meeting. The annual report for 2000 was presented. Other topics included: environmental windows for dredging and dredged material disposal projects, and updates on DMMO activities for the upcoming year and other efforts affecting dredging and dredged material disposal for Bay area projects.

The RWQCB discussed the impaired water body designation for the SF Bay and talked about upcoming Total Maximum Daily Loads (TMDL) for analytes such as mercury and PCBs. Mixing zones for dilution models were also discussed.

I. DMMO STAFF EDUCATION AND TRAINING

During 2001, the DMMO agencies continued to include education and training, both internal and external, as a primary objective. Education and training include: informal internal workshops regarding the roles, regulations and responsibilities of the member agencies; speakers at DMMO meetings; DMMO coordination and self-evaluation meetings; site visits; and participation in regional and national meetings and workshops relating to dredging and dredged material management. "Internal" training, such as field visits, is imperative to agencies' understanding of a particular project or process (e.g., hopper dredging). Similarly, internal meetings, workshops and retreats, addressing coordination and communication, are necessary to ensure that DMMO members continue to work well as a team. Just as important is "external" training, where DMMO members learn what other groups dealing with dredging and dredged material management are doing. The DMMO is an efficient and effective body, a necessary component to the success of LTMS, and a resource to the regulated public. The state of the art and the science continues to evolve and DMMO staff members need to learn about these changes in order to remain effective. Attendance at workshops, seminars and training, particularly those outside the Bay area, by DMMO members is needed to ensure that we keep current with regulatory and technical changes.

During 2001, the DMMO accomplished a number of our training goals. These are summarized below.

Internal Training:

- DMMO coordination, policy, and "self-evaluation" workshops were held in February and July
- In-house ITM training
- Mercury in the Bay presentation by Dr. K. Abusaba of the RWQCB.
- STFATE training by Dr. paul Schroeder, of USACE Waterways Experiment Station, Vicksburg, MI.

Site Visits to:

- *Essayons* hopper dredge
- MEC Analytical Laboratories in Tiburon
- Vallejo Marina
- Benicia Marina
- Foster City proposed disposal pond
- Port Sonoma Marina drying ponds
- Martinez Marina drying ponds
- Bel Marin Keys
- Sonoma Baylands

External Training:

- RMP Annual Meeting
- National Dredging Team meeting (Jacksonville, FL)
- Effective Meeting Management (State Water Resources Control Board, Sacramento, CA)
- USEPA and USACE Sediment Specialists and Dredged Material Managers Meeting (New Orleans, LA)
- Society of Environmental Toxicology and Chemistry Chapter annual meeting (Baltimore, MD)
- Society of Environmental Toxicology and Chemistry, Northern California Chapter annual meeting (Santa Cruz, CA)
- Coastal Ecology Course (Monterey, CA)
- State of the Estuary Conference (San Francisco, CA)
- Understanding Contaminated Harbor and River Sediment (Berkeley, CA, sponsored by University of Wisconsin, Madison)

III. ON-GOING AND FUTURE ACTIVITIES

As the DMMO continues to evolve, our responsibilities increase. We recognize the need to coordinate more fully with other dredging proponents in the region, such as in the Monterey Bay Region, within the Sacramento Delta and in southern California. We hope to extend the DMMO concept to other areas, particularly those that are within the jurisdiction of the USACE San Francisco District and EPA Region IX. We feel that our experiences can assist other groups in developing similar programs. In addition, we have discussed the need for additional guidance to the regulated public. On-going and proposed future activities of the DMMO are described below.

Continue to coordinate review of project proposals: The DMMO will continue to coordinate review of dredging project permit applications. Based on experience in 2001, it is expected that the DMMO increasingly will be involved in review of projects proposing disposal of dredged material at the ocean disposal site and at beneficial reuse sites.

Special Status Species Work Windows: In 1998, pursuant to the State and Federal Endangered Species Acts, the resource agencies (US Fish and Wildlife Service, NMFS, and CDFG) completed a programmatic biological opinion for the LTMS. The resulting consultation established work windows – delineated areas and periods where dredging or disposal would not significantly adversely impact the species – and provided incidental take for those areas. The environmental windows also designated areas and periods where further consultation with the appropriate agencies would be necessary on a case-by-case basis.

In 2001, an informal work group consisting of the resource agencies, the EPA, BCDC and the Bay Planning Coalition, met seven times to coordinate efforts between the agencies, streamline the consultation process and discuss issues of concern regarding the work windows. Through these efforts, the regulatory agencies have a better understanding of the resource agencies' informational needs prior to a consultation, further refinements were made to the work windows, and an informal consultation process was established. All of these efforts have produced a more expeditious consultation process without compromising endangered species protection. Further discussion regarding the environmental windows, mitigation measures and species protection will continue in 2002.

Regional Implementation Manual: The DMMO agencies will prepare a Regional Implementation Manual which, ultimately, will compile testing requirements for dredged sediment disposal at beneficial reuse, in-Bay and ocean sites based on Federal and State guidance.

Develop Alternate In-Bay Reference Sites: The EPA has recently announced that it plans to finalize the 1995 Draft "Reference Rule." This rule would improve consistency in reference site selection with that required by the Marine Protection Research and Sanctuaries Act (Ocean Dumping Act), as well as afford better and more appropriate protection to waters of the U.S.. EPA Region IX is undertaking coordination with the Regional Board to determine appropriate, fine-grained reference sites in San Francisco Bay for use by dredging project proponents. We expect that DMMO will adopt reference sites already identified by the Regional Board, but may modify locations or sampling conditions to ensure appropriate data. The DMMO will issue a Public Notice for review and comment when such sites are chosen.

Project tracking for future use in LTMS planning: Included as Appendix B to this report are the monthly volumes dredged during 2001 listed by project. Section II B of this report provides a summary table and discussion of these data. The DMMO will continue to track this information and make summaries available to the LTMS agencies for planning purposes.

Delta Dredging Reuse Strategy Technical Advisory Panel: In 2001, DMMO members provided input to the Delta Dredging Reuse Strategy Technical Advisory Panel (DDRS TAP) by attending meetings and submitting comments on technical reports that provide a framework for assessing the impacts of dredging projects in the Sacramento/San Joaquin River Delta. Under the umbrella of CALFED, DDRS TAP representatives from several state and federal regulatory and resource agencies along with local government and dredging community stakeholders have embarked on a process to develop a regional Dredge Material Management Plan for the Delta. DDRS TAP members are looking to the LTMS process for guidance in this endeavor, which

includes using the DMMO as a model for the development of a multi-agency review team to facilitate permit coordination and streamlining. We look forward to continuing to share our experiences in the development and operation of the DMMO, and hope they will assist groups in other regions, particularly those that are within the jurisdiction of the USACE San Francisco District and EPA Region IX, in developing similar programs.

Sediment quality database: For several years, DMMO staff have been interested in developing a database containing sediment testing results from dredged material evaluations. Such a database would assist applicants in preparing dredging SAPs and Tier I requests and would assist DMMO staff in reviewing projects and in decision making. Currently, DMMO staff do not have the expertise and the resources to develop such a database internally. We are looking for opportunities to tie in to grant programs and existing efforts.

Sampling and Analysis Plan (SAP) Guidance: The DMMO issued Draft Sampling and Analysis Plan Guidance via Public Notice 99-4. We expect to issue final guidance in 2002.

Analysis and Reporting of PCBs in Sediments: While the Inland Testing Manual encourages the analysis of PCBs by congener, the current local ITM Guidelines provide a list of Aroclors to be analyzed during routine analysis. The DMMO is developing guidance for the analysis of PCBs in dredged material evaluations. We expect that the guidance will recommend analysis by the congener method, and will provide a list of recommended congeners for analysis. The guidance will also discuss interpretation of the results of congener analyses.

Workload Issues: The DMMO was not able to accomplish as much as we would have liked in 2001. This was due in large part to workload issues for the USACE DMMO representatives. During 2001, the USACE Regulatory Branch had a vacancy in the position that deals with dredging permits, so the USACE DMMO representatives filled that role. This took up a great deal of their time, and their ability to keep up with DMMO responsibilities was severely limited. There is now a new staff person in the Regulatory position, and we hope that the USACE representatives will be able to devote more time to DMMO issues.

IV. CONCLUSIONS

The DMMO has continued to improve review of dredging project proposals, encourage intra- and inter-agency consistency in the decision making process, while ensuring environmental protection. The DMMO continues to expand its role in dredging and dredged material management in the Bay area by increasing our review of projects proposing upland disposal, by participating in working groups of concern to dredged material management, and by increasing public participation in the process. The agencies recommend that the pilot DMMO be finalized and only continue in a pilot phase, pending formalization of the program. In the future the agencies comprising the DMMO will act to formalize this arrangement through an updated MOU.