



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
SOUTH PACIFIC DIVISION, CORPS OF ENGINEERS
1455 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94103-1399

CESPD-PDC

MEMORANDUM FOR Commander, San Francisco District, US Army Corps of Engineers,
ATTN: CESPN-PM-C (Ms. Joe'l Benegar)

Subject: Review Plan Approval for Humboldt Harbor and Bay Operations and Maintenance
Dredging Review Plan, Humboldt Bay, California, October 24, 2012

1. The attached Review Plan for the Humboldt Harbor and Bay Operations and Maintenance Dredging Review Plan, Humboldt Bay, California, October 24, 2012 has been prepared in accordance with EC 1165-2-209. The Review Plan has been coordinated internally within the DST. The CESPD-RBT will serve as the RMO.
2. The Review Plan does not include independent external peer review.
3. I hereby approve this Review Plan, which is subject to change as circumstances require, consistent with project development under the Project Management Business Process. Subsequent revisions to this Review Plan or its execution will require new written approval from this office.
4. For any additional information or assistance, contact Paul Devitt, District Support Team Lead, (415) 503-6558, Paul.A.Devitt@usace.army.mil

Building Strong All The Way From New Mexico To The Pacific!

Encl


MICHAEL C. WEHR
BG, USA
Commanding



DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 2288
MOBILE, ALABAMA 36628-0001

REPLY TO
ATTENTION OF:

CESAM-PD (1105-2-40a)

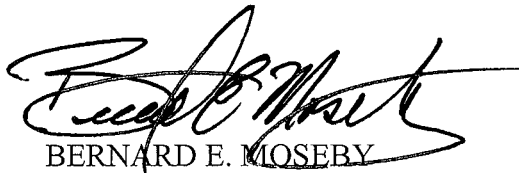
1 October 2012

MEMORANDUM FOR MS. JOEL BENEGAR (CESPN-ET-PF, PROJECT PLANNER, U.S. ARMY CORPS OF ENGINEERS, SAN FRANCISCO DISTRICT, 1455 MARKET STREET, SAN FRANCISCO, CA 94103-1398

SUBJECT: Review Plan Approval, Humboldt Harbor and Bay Operations and Maintenance Dredging Material Management Plan, San Francisco District

1. The Deep Draft Navigation Planning Center of Expertise (DDNPCX) has reviewed the Review Plan (RP) for the subject study and concurs that the RP satisfies peer review policy requirements outlined in Engineering Circular (EC) 1165-2-209 Civil Works Review Policy, dated 31 January 2010.
2. The review was performed by Mr. Johnny L. Grandison, Review Manager, DDNPCX. The RP checklist that documents the review is enclosed.
3. The DDNPCX recommends the RP for approval by the MSC Commander. Upon approval of the RP, please provide a copy of the approved RP, a copy of the MSC Commander Approval memorandum, and the link to where the RP is posted on the District website.
4. Thank you for the opportunity to assist in the preparation of the RP. Please coordinate any Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Model Certification efforts outlined in the RP with the Review Manager, DDNPCX at (251) 694-3804.

Encls


BERNARD E. MOSEBY
Technical Director, DDNPCX

CF:
CESAD-PDS/PAYNES
CESAD-PDS/STRATTON
CESAD-PDS/SMALL

REVIEW PLAN

**HUMBOLDT HARBOR AND BAY
OPERATIONS AND MAINTENANCE DREDGING
DREDGE MATERIAL MANAGEMENT PLAN**

Humboldt Bay, California

**SAN FRANCISCO DISTRICT
U.S. ARMY CORPS OF ENGINEERS**



**US Army Corps
of Engineers ®**

MSC Approval Date: 30 October 2012

Last Revision Date: 24 October 2012

**REVIEW PLAN
HUMBOLDT HARBOR AND BAY
OPERATIONS AND MAINTENANCE DREDGING
DREDGE MATERIAL MANAGEMENT PLAN**

TABLE OF CONTENTS

1. PURPOSE AND REQUIREMENTS	1
A. Purpose	
B. References	
C. Requirements	
2. MODEL CERTIFICATION AND APPROVAL	3
A. Planning Models	
B. Engineering Models	
3. PUBLIC PARTICIPATION	3
4. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION.....	3
5. STUDY INFORMATION	4
A. Decision Document	
B. Study/Project Description	
C. Challenges and Risks	
D. Factors Affecting Scope and Level of Review	
E. In-Kind Contributions	
6. AGENCY TECHNICAL REVIEW (ATR).....	8
A. Funding	
B. Timing and Schedule	
C. Review	
D. Resolution	
E. Certification	
7. INDEPENDENT EXTERNAL PEER REVIEW (IEPR).....	11
8. POINTS OF CONTACT.....	12

TABLES & FIGURES

Table 1. ATR Team Members and Estimated Costs.....	8
Table 2. ATR Schedule.....	10
Figure 1. Humboldt Bay Dredging Channels and Placement Sites.....	6

ATTACHMENTS

- Attachment 1. Team Rosters
- Attachment 2. Sample Statement of Technical Review for Decision Documents
- Attachment 3. Review Plan Revisions
- Attachment 4. DQC Certification

APPENDICES

- Appendix A. Economics Appendix
- Appendix B. Engineering Appendix

1. PURPOSE AND REQUIREMENTS

A. Purpose. This Review Plan (RP) defines the scope and level of peer review for the Humboldt Bay Dredged Material Management Plan (DMMP) for the Operations and Maintenance Dredging project, located in Humboldt Bay, near Eureka, California. This review plan describes the level of peer review required for implementation of the 20-year DMMP. The review will include the DMMP, the Economics Appendix and the Engineering Appendix to the DMMP.

B. References

- (1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
- (2) EC 1105-2-40, Water Resources Policies and Authorities Review of Decision Documents, 22 Aug 2008.
- (3) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
- (4) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
- (5) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (6) Draft Navigation Program: O&M Dredging Program Management Plan (PgMP), Revised PgMP for FY12, 20 October 2011

C. Requirements. This RP was developed in accordance with EC 1165-2-209, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and operation, maintenance, repair, replacement and rehabilitation (OMRR&R). The EC outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-209) and planning model certification/approval (per EC 1105-2-412).

(1) **District Quality Control.** DQC is the review of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Humboldt Bay Dredged Material Management Plan (DMMP) for the Operations and Maintenance Dredging project Draft Navigation Program: O&M Dredging Program Management Plan (PgMP) (Revised PgMP for FY12, 20 October 2011), to which this RP will ultimately be appended. It is managed in the San Francisco District and may be conducted by in-house staff as long as the reviewers are not doing the work involved in the study, including contracted work under review. Basic quality control tools include a Quality Management Plan (QMP) providing for seamless review, quality checks and reviews, supervisory reviews, Project Delivery Team (PDT) reviews, etc. Additionally, the PDT is responsible for a complete reading of the report to assure the overall integrity of the report, technical appendices and the recommendations before the approval by the District Commander. Non-PDT members and/or supervisory staff will conduct this review for major draft and final products, including products provided by the non-Federal sponsors as in-kind services, and products provided by contractors following review of those products by the PDT. The Major Subordinate Command (MSC)/District Quality Management Plan (QMP) will address the

conduct and documentation of this fundamental level of review. A Quality Control Plan (QCP) will be included in the Project Management Plan (PMP) for the subject study. DQC is required for this study and is not addressed further in this RP.

(2) **Agency Technical Review.** ATR is an in-depth review, managed within USACE, conducted by a qualified team outside of the home district whom are not involved in the day-to-day production of a project and its associated work products. The purpose of ATR is to ensure the proper application of clearly established criteria, regulations, laws, codes, principles and professional practices. The ATR team reviews the various work products and assures that all the parts fit together in a coherent whole.

ATR teams will be comprised of senior USACE personnel, including Regional Technical Specialists (RTS). Team members may be supplemented by outside experts as appropriate. To ensure independence, the leader of the ATR team shall be from outside the home MSC. DrChecks will be used to document all ATR comments, responses, and associated resolutions accomplished.

(3) **Independent External Peer Review.** EC 1105-2-410 and EC 1165-2-209 re-characterized the external review process that was originally added to the Corps review process with EC 1105-2-408. EC 1165-2-209 requires that a risk informed decision is documented to determine if a project requires IEPR. The risk informed decision for the Humboldt Bay Dredged Material Management Plan (DMMP) for the Operations and Maintenance Dredging project is documented in Section 6 of this RP.

EC 1165-2-209 describes two types of IEPR. Type I IEPR is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. Type I IEPR is managed by an outside eligible organization (OEO) as described in the Internal Review Code Section 501(c) (3), and is exempted from Federal tax under Section 501(a) of the Internal Revenue Code of 1986. The OEO shall be independent, free from conflicts of interest, shall not carry out or advocate for or against Federal water resources projects, and has experience in establishing and administering IEPR panels.

Type II IEPR includes safety assurance review (SAR) and is applied to design and construction activities for hurricane, storm and flood risk management projects, as well as projects with existing and potential hazards that pose a significant threat to human life. Exemptions from IEPR requirements must be granted by the Chief of Engineers. Type II IEPR/SAR is managed by a USACE Review Management Office (RMO) or a contractor and may not be exempt from the Federal Advisory Committee Act (FACA). This study does not address a hurricane and storm risk management project, or flood risk management project, nor does failure of the project pose a significant threat to human life, and therefore, the project is not required to undergo a safety assurance review.

(4) **Policy and Legal Compliance Review.** In addition to the technical reviews, decision documents will be reviewed throughout the study process for their compliance with law and policy. These reviews culminate in Washington-level determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the Chief of Engineers. Guidance for policy and legal compliance reviews is addressed further in Appendix H, ER 1105-2-100. Technical reviews described in EC 1105-2-410 are to augment

and complement the policy review processes by addressing compliance with published Army polices pertinent to planning products, particularly polices on analytical methods and the presentation of findings in decision documents. DQC and ATR efforts are to include the necessary expertise to address compliance with published planning policy. Counsel will generally not participate on ATR teams but may participate at the discretion of the district or as directed by higher authority. When policy and/or legal concerns arise during DQC or ATR efforts that are not readily and mutually resolved by the PDT and the reviewers, the district will seek issue resolution support from the MSC and HQUACE in accordance with the procedures outlined in Appendix H ER 1105-2-100.

2. MODEL CERTIFICATION AND APPROVAL

- A. Planning Models.** EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. No planning models were used in development of this DMMP.
- B. Engineering Models.** The Engineer and Research Development Center's (ERDC) Short Term Fate (STFATE) dredged material disposal model was used to evaluate nearshore placement of dredged material along areas adjacent to the north spit of Humboldt Bay. Because STFATE is on the Corps Hydrology, Hydraulics, and Coastal Community of Practice's (HH&C CoP) list of preferred models, no model certification or approval is needed.

3. PUBLIC PARTICIPATION

The Five-Year Programmatic Humboldt Harbor and Bay Operations and Maintenance (EA) that includes the nearshore demonstration site alternative was circulated for public review in January 2012. A Finding of No Significant Impact (FONSI) was signed by the SPN Commander on March 2012. Although the FONSI has been approved, implementation of the Demonstration Site as a dredged material beneficial reuse site is contingent on coordination with various federal and State resource agencies. There will be an additional public comment period via the Coastal Commission's Consistency Determination and hearing process.

Additionally, the dredged material management alternatives were presented at two conferences in Humboldt called the Humboldt Bay Symposium. The SPN presented results from the Beneficial Reuse Project at Ocean Beach at this conference in 2008, and in 2010 presented the DMMP and proposed near shore demonstration project. In 2011 the SPN had two meetings with Humboldt Bay Initiative, which is a group of scientists and stakeholders in Humboldt. Here they presented information and results from the DMMP analysis for the near shore project. In the future, the SPN plans to circulate the DMMP for public comment. Future execution is contingent on a favorable consistency determination from the Coastal Commission.

4. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The Review Management Organization (RMO) is responsible for managing the overall peer review effort described in this RP. The RMO for this RP is the DDNPCX. In accordance with EC 1165-2-209,

this RP has been coordinated with the Deep Draft Navigation Planning Center of Expertise (DDN-PCX), located in the South Atlantic Division. The DDN-PCX is responsible for the accomplishment and quality of ATR for the Humboldt Bay DMMP for the Operations and Maintenance Dredging project.

Review Plan Approval and Posting. In order to ensure the RP is in compliance with EC 1165-2-209 and the MSC's QMP, this RP must be approved by the Commander, South Pacific Division (SPD). Once the RP is approved, the San Francisco District will post it to its District public website and notify South Pacific Division. A link to the RP will be placed on the DDN-PCX website.

5. STUDY INFORMATION

- A. Decision Document.** The Humboldt Bay Dredged Material Management Plan (DMMP) presents the U.S. Army Corps of Engineers (USACE), San Francisco District (SPN) 20-year programmatic plan for the maintenance of the authorized federal navigation channels into and within Humboldt Bay, California, and for the management of material dredged from those channels. The purpose of the Humboldt Bay DMMP is to ensure that the O&M project is dredged in an environmentally-acceptable manner, uses sound engineering techniques, is economically warranted, has identified dredged material placement sites that will suffice for a minimum of 20 years, and beneficially uses the dredged material to the maximum possible extent. The South Pacific Division Commander will review this DMMP to determine if it is in compliance with Federal laws and regulations applicable to dredged material management plans.
- B. Study/Project Description.** The existing federal project for the construction, maintenance, deepening, and improvements of Humboldt Bay's navigation channels was authorized and amended by numerous River and Harbor Acts, dating from March 3, 1881 to August 13, 1968 (Table 2). Legislation, dated September 23, 1982, authorized the study for the Humboldt Harbor and Bay Deepening Navigation Improvement Project.

To accommodate ships of increasing draft, the Bar and Entrance Channel into Humboldt Bay has been periodically deepened and is currently maintained at an authorized depth of 48 ft mean lower low water (MLLW). With each progressive deepening, the subsequent volume of annually-dredged material increased. Currently, the average annual dredged volume for the Bar and Entrance Channel is 1,082,000 cubic yards (yd³), with an average annual cost of roughly \$3,000,000. The Interior Channels vary in depth from 26 to 38 ft MLLW, and the cumulative average annual dredged volume is 139,000 yd³. To dredge the whole Humboldt Harbor, the annual cost is roughly \$5,000,000.

Prior to 1988, dredged sediment was placed southwest of the South Jetty at a nearshore site where the water depth is approximately 55 ft MLLW. Because several decades of shoaling created a navigation hazard at SF-3, another nearshore site, the Nearshore Disposal Site (NDS), was used in 1988 and 1989. The NDS is in a depth of 50 to 60 ft MLLW approximately two miles south of SF-3 (center to center). Use of the NDS was discontinued because of concerns over possible negative impacts to navigation and fisheries.

Since 1990, the dredged sediment has been placed at the Humboldt Open Ocean Placement Site (HOODS), an offshore site in a depth of approximately 160 to 180 ft MLLW. The HOODS was chosen because it is a non-dispersive site, located in deep water, and away from

productive fishery areas. During the site-designation process, participating agencies recognized that this open-ocean placement site completely removes sediment from the littoral zone, potentially creating negative impacts on the beaches of the Eureka Littoral Cell, which includes the spits north and south of the entrance to the Bay. The Humboldt Shoreline Monitoring Program analysis (HSMP; section 2.3.4.2) shows seaward shifts (accretion) of the South Spit and shoreward shifts (erosion) of the North Spit (USACE, Humboldt Shoreline Monitoring Analysis of Data, 1992 through 2005, 2007). Although the causes for this trend have not been linked to the placement of dredged material at HOODS, USACE and its partners are developing beneficial-use measures that would retain dredged sand within the longshore transport system of the Eureka littoral cell to ensure that dredging practices do not contribute to the erosion along the North Spit.

As part of a multi-agency collaborative process in 2006, the California Coastal Commission's (CCC) 2008-2011 Consistency Determination for the Humboldt Bay Navigation Channels included a strategy to develop a nearshore beneficial-use demonstration site offshore of the North Spit. In this DMMP, USACE evaluates such a site as a dredged material placement alternative that would keep dredged sand within the Eureka littoral cell. If this alternative is approved for implementation, site use will commence the next dredging episode, and a concurrent monitoring program will be established to determine if permanent use of the site is warranted.

The Five-Year Programmatic Humboldt Harbor and Bay Operations and Maintenance Dredging (FY 2012- FY 2016) Environmental Assessment (EA) that includes the nearshore demonstration site alternative was circulated for public and agency review in January 2012 (see Figure 1). The 30 day public review period lasted from January 13, 2012 through February 13, 2012. A Finding of No Significant Impact (FONSI) was signed by the SPN Commander on March 2012. Although the FONSI has been approved, implementation of the Demonstration Site as a dredged material beneficial reuse site is contingent on coordination with various federal and State resource agencies. A copy of the DMMP will be provided to the Coastal Commission, whose internal process will distribute it to State and Local agencies.



Figure 1. Humboldt Bay Dredging Channels and Placement Sites. Humboldt County, California. *Datum: Mean Lower Low Water*

As mandated by Congress, USACE maintains safe navigation in the harbors and marinas throughout the United States. Accordingly, SPN annually dredges some or all of the 9.9 miles of the federally-authorized navigation channels into and inside of Humboldt Bay to ensure safe and efficient passage for vessels calling on the port. Without proper maintenance dredging of those channels, passage would be precluded for many vessels that would otherwise use the bay. Such a disruption could result in adverse impacts to the national and regional economy and could endanger ships seeking safe harbor from the violent storms that commonly occur during the winter. As such, this navigation project promotes National Economic Development, and is the primary and single purpose of this project. Beneficial reuse of dredged materials may confer ancillary benefits from the project such as improved shoreline accretion, and regional economic development.

- C. Challenges and Risks.** There are no significant challenges to completing the DMMP. However, obtaining a favorable Consistency Determination (CD) from the California Coastal Commission for the purposes of utilizing the Humboldt Bay nearshore (beneficial reuse) demonstration site for the placement of material could prove to be a challenge. We will continue to engage with our project agency partners and stakeholders as we move through the review process for the CD.

The placement and management of dredged material at Humboldt Bay is low risk, since the HOODS is a viable and low-risk backup option that should remain available. The dredged material management at Humboldt Bay poses no risk to human life and safety; nor does it pose a high technical, institutional, or social risk. If the demonstration site is utilized, project monitoring will reduce the risk of nearshore shoaling concerns. Monitoring would help to understand the Humboldt Bay littoral processes and will help to track the evolution of the material placed in the nearshore environment. Monitoring would include bathymetric and topographic surveys, grain-size analyses, instrument deployments, video imagery, and a tracer study.

- D. Factors Affecting the Scope and Level of Review.** This DMMP will be used as guidance for the next phase of dredged material management in the Humboldt Bay region. It is part of a collaborative process to address sediment management in Humboldt Bay. It is intended to be a working document that identifies alternative dredged-material placement strategies for the Humboldt Bay region. As a decision document, this DMMP considers placement alternatives for managing the volumes of dredged material resulting from the annual Humboldt Bay O&M dredging. Minimally, alternatives should include a least-costly base plan that can realize a minimum of twenty years of dredging and placement options in a technically sound and environmentally acceptable manner¹. The final recommended plan should accomplish long-term placement needs, be economically justified in terms of benefits versus costs, be technically feasible, and comply with environmental statutes.

The review of this document should ensure that the above has been accomplished through the DMMP and its technical analysis as documented in the Coastal Engineering Appendix. As described in section 5C, the project does not represent a high level of risk associated with technical, institutional, or social challenges, or human life and safety. It does not represent a controversial project.

¹ PGL 40 and ER-1105-2-100, Section E-15

- E. In-Kind Contributions.** The Humboldt Bay DMMP has been conducted at 100% Federal expense by the San Francisco District. Project review is funded by the San Francisco District.

6. AGENCY TECHNICAL REVIEW (ATR)

ATR is required for the DMMP covered in this Review Plan and it will be managed by the RMO. The documents that will undergo ATR include the DMMP, Economics Appendix, and the Coastal Engineering Appendix. Because there are no cost engineering work products, it is not necessary for the Cost Engineering Directory of Expertise (DX) to review this RP or be involved in ATR. Coordination with the Cost DX, however, will be accomplished.

Required ATR Team Expertise. ATR teams will be comprised of senior USACE personnel, including Regional Technical Specialists (RTS), etc. Team members may be supplemented by outside experts as appropriate. To ensure independence, the leader of the ATR team shall be from outside the home MSC. DrChecks will be used to document all ATR comments, responses, and associated resolution accomplished.

An ATR Team Leader shall be designated for the ATR and shall be from outside the home MSC to ensure independence. The ATR Team Leader shall have project planning expertise and is responsible for providing information necessary for setting up the review, communicating with the Project Planner, providing a summary of critical review comments, collecting grammatical and editorial comments from the ATR team (ATRT), ensuring that the ATRT has adequate funding to perform the review, facilitating the resolution of the comments, and certifying that the ATR has been conducted and resolved in accordance with policy.

Agency Technical Review Team (ATRT). The ATRT will be comprised of individuals that have not been involved in the development of the decision and implementation work products and will be chosen based on expertise, experience, and/or skills. The members will roughly mirror the composition of the PDT and to the extent practicable come from outside of the South Pacific Division region. It is anticipated that the team will consist of four reviewers. The ATRT member qualifications and expected costs are presented in Table 1.

Table 1.
ATR Team Members and Estimated Costs

Discipline	Experience Needed for Review	Estimated Cost
ATR Lead	The ATR lead should be a senior professional with extensive experience in preparing Civil Works decision documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. The ATR lead may also serve as a reviewer for a specific discipline (such as planning, economics, etc).	\$2,000
Plan Formulation	Planner proficient with navigation and/or DMMP policy and guidance. Familiarity with the "Planning Guidance Notebook" (ER-1105-100) and the Water Resources Council's Principals and Guidelines.	\$2,000
Coastal Engineering	Coastal engineer experienced in the study of physical processes (water level, wind, waves, current, sediment transport), with nearshore placement of material in nearshore-coastal areas, and in the use of the model STFATE.	\$3,000
Environmental	The Environmental Planner familiar with environmental evaluation and compliance requirements pursuant to the "Procedures for Implementing NEPA" (ER 200-2-2), national environmental statutes, applicable executive orders, and other Federal planning requirements. Experience with ESA and coastal fishery resources also required.	\$2000
Economics	Economist familiar with analysis of navigation and dredging projects and economic justification of projects in accordance with current USACE policy.	\$3,000

Communication. The communication plan for ATR is as follows:

(1) The team will use DrChecks to document the ATR process. A project portfolio will be created in the system to allow access by all PDT and ATRT members. An electronic version of the document shall be posted in DrChecks at least one business day prior to the start of the comment period.

(2) The Project Planner shall inform the ATR Leader when all responses have been entered into DrChecks and conduct a briefing to summarize comment responses to highlight any areas of disagreement.

(3) A revised electronic version of the report and appendices with comments incorporated shall be posted in DrChecks for use during back checking of the comments.

(4) PDT members shall contact ATR members or as appropriate to seek clarification of a comment's intent or provide clarification of information in the report. No contact between the PDT and the ATR members shall occur, however, without first coordinating with the PM and the ATR Leader. Reviewers will be encouraged to contact PDT members directly via email or phone to clarify any confusion. DrChecks shall not be used to post questions needed for clarification or to post typographical errors.

A. Funding

(1) The PDT District shall provide labor funding by cross charge labor codes. The Project Planner will work with the DDNPCX to ensure that adequate funding is available and is commensurate with the level of review needed. The current cost estimate for this review is \$14,000 (Table 1). Any funding shortages will be negotiated on a case by case basis and in advance of a negative charge occurring.

(2) The DDNPCX shall provide organization codes for each team member and a responsible financial point of contact (CEFMS responsible employee) for creation of labor codes. Reviewers shall monitor individual labor code balances and alert the Project Planner to any possible funding shortages.

B. Timing and Schedule.

(1) Throughout the development of this document, the team will conduct seamless review to ensure planning quality.

(2) The ATR process for this document will follow the following timeline. All relevant work products will be reviewed.

Table 2.
ATR Schedule

ATR Timeline Task	Date
Provide Work Products to ATR Team/Kickoff Meeting	10/10/2012
ATR Comments	10/19/2012
PDT Responses	11/2/2012
Back check	11/7/2012
Issue Resolution Conference	11/8/2012
Final ATR Back check	11/16/2012

C. Review.

(1) ATRT responsibilities are as follows:

- (a) Reviewers shall confirm that work was done in accordance with established professional principles, practices, codes, and criteria and for compliance with laws and policy. Comments on the report shall be submitted into DrChecks.
- (b) Reviewers shall pay particular attention to one's discipline but may also comment on other aspects as appropriate. Reviewers that do not have any significant comments pertaining to their assigned discipline shall provide a comment stating this.
- (c) Grammatical and editorial comments shall not be submitted into DrChecks. Comments should be submitted to the ATRT Leader via electronic mail using tracked changes feature in the Word document or as a hard copy mark-up. The ATRT Leader shall provide these comments to the Project Planner.
- (d) Review comments shall contain these principal elements:
 - 1 a clear statement of the concern
 - 2 the basis for the concern, such as law, policy, or guidance
 - 3 significance for the concern
 - 4 specific actions needed to resolve the comment

- (d) The “Critical” comment flag in DrChecks shall not be used unless the comment is discussed with the ATRT Leader and/or the Project Planner first.
- (f) When reviewing the DMMP, the ATRT should verify that it is sufficiently detailed for each technical specialty. In this way, the criteria that were used, the critical assumptions which were made, and the analytical methods that were used will be evident for purposed review and historical documentation. Verify that it contains summaries of important calculations

(2) PDT Team responsibilities are as follows:

- (a) The team shall review comments provided by the ATRT in DrChecks and provide responses to each comment using “Concur”, “Non-Concur”, or “For Information Only”. *Concur* responses shall state what action was taken and provide revised text from the report if applicable. *Non-Concur* responses shall state the basis for the disagreement or clarification of the concern and suggest actions to negotiate the closure of the comment.
- (b) Team members shall contact the PDT and ATRT managers to discuss any “Non-Concur” responses prior to submission.

D. Resolution.

(1) Reviewers shall back check PDT responses to the review comments and either close the comment or attempt to resolve any disagreements. The ATRT Lead, in conjunction with the DDNPCX, shall use conference calls in an attempt to resolve any conflicting comments and responses.

(2) Reviewers may “agree to disagree” with any comment response and close the comment with a detailed explanation. If a reviewer and the responder cannot resolve a comment, it should be brought to the attention of the ATRT Leader. If not resolved by the ATR Leader, the DDNPCX will seek resolution through the approved resolution process. The vertical team will be informed of any policy variations or other issues that may cause concern during HQ review.

E. Certification. Within one week after all issues raised by the reviewers have been addressed to the review team’s satisfaction, the DDN-PCX shall prepare a Certification Report. The Certification Report, that will be provided to SPD, shall be accompanied by the ATRT Leader’s Summary Report.

7. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

IEPR may be required for decision documents under certain circumstances. IEPR is the most independent level of review, and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. A risk-informed decision, as described in EC 1165-2-209, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted.

Decision on IEPR. Type I IEPR is not required for this project because it does not meet the factors listed in paragraph 1 of Appendix D of EC 1165-2-209:

- The project does not involve a significant threat to human life/safety assurance;
- The total project cost is less than \$45 million;
- There is no request by the Governor of an affected state for a peer review by independent experts;
- The project does not require an Environmental Impact Statement (EIS),
- The project is not likely to have significant economic, environmental, and/or social effects to the Nation;
- The project/study is not likely to have significant interagency interest;
- The project/study is not likely highly controversial;
- The decision document is not likely to contain influential scientific information or be a highly influential scientific project;
- The information in the decision document or proposed project design is not likely to be based on novel methods, involve the use of innovative materials or techniques, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices

Type II IEPR is not required because this project does not rise to the significance of having an OEO review and does not meet any of the criteria for conducting Type II IEPR as per Paragraph 2 of Appendix E of EC 1165-2-209:

- There is no change to human life and safety that would result from construction of this project.
- The project does not involve the use of innovative materials or techniques where the engineering is based on novel methods, present complex challenges for interpretations to minimize risks to human health and safety;, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices;
- The project design does not require redundancy, resiliency, and/or robustness to minimize risks to human health and safety;
- The project does not include unique construction sequencing or a reduced or overlapping design construction schedule

8. POINTS OF CONTACT

Questions about this Review Plan may be directed to the following:

- Joél Benegar, Project Planner, San Francisco District, (415) 503-6848 or Joel.R.Benegar@usace.army.mil
- Peter Mull, Project Manager, San Francisco District, (415) 503-6733 or Peter.Mull@usace.army.mil,
- Johnny Grandison, DDN PCX, Mobile District, (251) 694-3804 or Johnny.L.Grandison@usace.army.mil
- Anne Sturm, Navigation and Coastal Business Line Manager, South Pacific Division, (415) 503-6587 or Anne.K.Sturm@usace.army.mil

ATTACHMENT 1: TEAM ROSTERS

TABLE 1: DISTRICT REVIEW TEAM/PROJECT DELIVERY TEAM (PDT)			
RESOURCE NAME	RESOURCE CODE	PDT MEMBER	PHONE NUMBER
Project Manager	CESPN-PM-A	Peter Mull	(415) 503-6733
Office of Counsel	CESPN-OC	Merry Goodenough	(415) 503-6760
Project Planner	CESPN-ET-PF	Joél Benegar/John Dinger	(415) 503-6848/ (415) 503-6853
Coastal Engineer	CESPN-ET-EW	Lisa Andes	(415) 503-6810
Environmental Planner	CESPN-ET-PA	Justin Kosta	(415) 503-6859
Economist	CESPN-ET-PC	Mark Bierman	(415) 503-6830

TABLE 2: AGENCY TECHNICAL REVIEW (ATR) TEAM			
DISCIPLINE	RESOURCE CODE	ATR TEAM MEMBER	PHONE NUMBER
ATR Team Leader	K5K0000	Johnny Grandison	251-694-3816
Planning	K5K0000	Johnny Grandison	251-694-3816
Environmental	K5K0000	Michael Malsom	251-694-3816
Coastal Engineering	K3M1F00	Elizabeth Godsley	561-472-3520
Economics	TBD	Diane Karnish	651-290-5402

TABLE 3: Verticle Team			
Name	Discipline	Phone	Email
Paul Devitt	District Support Team Lead/ Civil Works	415-503-6556	Paul.A.Devitt@usace.army.mil

TABLE 4: PCX Deep Draft Navigation			
Name	Discipline	Phone	Email
Johnny Grandison	PCX Deep Draft Navigation	251-694-3816	Johnny.L.Grandison@usace.army.mil

ATTACHMENT 2: STATEMENTS OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the Humboldt Bay Dredged Material Management Plan for the Operations and Maintenance Dredging project located in Humboldt Bay, near Eureka, California. The ATR was conducted as defined in the project’s Review Plan to comply with the requirements of EC 1165-2-209. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer’s needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrCheckssm.

Johnny Grandison
ATR Team Leader
CESAM-PD-FP

Date

Peter Mull
Project Manager
CESPN-PM-A

Date

Syed Burney
Review Management Office Representative
CESPN-ET

Date

CERTIFICATION OF AGENCY TECHNICAL REVIEW

All concerns resulting from the ATR of the project have been fully resolved.

Lawrence Crawley
Chief, Engineering Branch
CESPN-ET-ED

Date

Tom Kendall
Chief, Planning Branch
CESPN-ET-P

Date

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 4: DQC CERTIFICATION

**STATEMENT OF TECHNICAL REVIEW
COMPLETION OF QUALITY ASSURANCE REVIEW AND DISTRICT QUALITY CONTROL**

The Humboldt Harbor and Bay Operations and Maintenance Dredging Dredge Material Management Plan package has been completed. The Five-Year Programmatic Humboldt Harbor and Bay Operations and Maintenance Dredging (FY 2012- FY 2016) Environmental Assessment (EA) that includes the nearshore demonstration site alternative was circulated for public and agency review in January 2012. A Finding of No Significant Impact (FONSI) was signed by the SPN Commander on March 2012. Notice is hereby given that (1) a Quality Assurance review has been conducted as defined in the Quality Assurance Plan and (2) district quality that is appropriate to the level of risk and complexity inherent in the project, have been conducted as defined in the project's Peer Review Plan. During the district quality control review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the result, including whether the product meets the customer's needs consistent with law and existing Corps policy. The review also assessed the DQC documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from QA and DQC have been resolved.

Tom Kendall
Chief, Planning Branch
CESPN-ET-P

Date

Lawrence Crawley
Chief, Engineering Branch
CESPN-ET-ED

Date

Peter Mull
Project Manager
CESPN-PM-A

Date

ATTACHMENT 5: REVIEW PLAN APPROVALS

1. Deep Draft Navigation Planning Center of Expertise (DDNPCX) Review Plan Approval Memorandum
2. South Pacific Division (SPD) District Support Team (DST) Approval for Review Plan