DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS NORTH ATLANTIC DIVISION
FORT HAMILTON MILITARY COMMUNITY
302 GENERAL LEE AVENUE
BROOKLYN, NY 11252-6700

REPLY TO
ATTENTION OF

CENAD-PD-PP

JUL - 1 2013

JUL 26, 2013

MEMORANDUM FOR Commander, Philadelphia District, ATTN: CENAP-PL

SUBJECT: Review Plan Approval for New Jersey Beneficial Use of Dredged Material for the Delaware River Feasibility Study

1. The attached Review Plan for the subject study has been prepared in accordance with EC 1165-2-214, Civil Works Review.

2. The Review Plan has been coordinated with the Deep Draft Navigation Planning Center of Expertise of the South Atlantic Division, which is the lead office to execute this plan. For further information, contact Mr. Johnny Grandison at 251-694-3804. The Review Plan currently does not include independent external peer review and will be revised after a risk-informed decision analysis has been made.

3. I hereby approve this Review Plan, which is subject to change as study circumstances require, consistent with study development under the Project Management Business Process. Subsequent revisions to this Review Plan or its execution will require new written approval from this office.

Encl
as

KENT D. SAVRE
Brigadier General, USA
Commanding

REVIEW PLAN

New Jersey
Beneficial Use of Dredged Material
for the Delaware River
Feasibility Study

Philadelphia District

MSC Approval Date: 1 July 2013
Last Revision Date: April 2013

US Army Corps
of Engineers ®

REVIEW PLAN

New Jersey Beneficial Use of Dredged Material for the Delaware River Feasibility Study

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1. PURPOSE AND REQUIREMENTS

a. **Purpose.** This Review Plan (RP) defines the scope and level of peer review for the single purpose New Jersey Beneficial Use of Dredged Material for the Delaware River Feasibility Study.

b. **References**

(1) Engineering Circular (EC) 1165-2-214, Civil Works Review Policy, 15 Dec 2012
(2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
(3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
(4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
(5) Project Management Plan for study
(6) MSC and/or District Quality Management Plan(s)

c. **Requirements.** This review plan was developed in accordance with EC 1165-2-214, 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 1165-2-214) and planning model certification/approval (per EC 1105-2-412).

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. The RMO for decision documents is typically either a Planning Center of Expertise (PCX) or the Risk Management Center (RMC), depending on the primary purpose of the decision document. The RMO for the peer review effort described in this Review Plan is the Deep Draft Navigation Planning Center of Expertise (DDNPCX). The RMO will coordinate with the Civil Works Cost Engineering Mandatory Center of Expertise (MCX) to ensure the appropriate expertise is included on the review teams to assess the adequacy of cost estimates, construction schedules and contingencies.

3. STUDY INFORMATION

Decision Document. The decision document for this project will be a feasibility level analysis for the New Jersey Beneficial Use of Dredged Material for the Delaware River Feasibility Study. The analysis will contain the plan formulation, and Environmental Assessment and the project's economic justification. This document will be approved at the HQUSACE level and it will require Congressional Authorization.

Study/Project Description. Beneficial use of dredged material opportunities, using Delaware River and tributary maintenance dredged material, are presented for New Jersey. A feasibility study is recommended relevant to the study authority for beneficial use of dredged material in the Delaware

Estuary. There is Federal interest in ecosystem restoration, navigation, and flood risk management that can be developed within existing policy.

These beneficial use opportunities are best facilitated utilizing maintenance dredged material from Federal and non-Federal navigation projects including: the Delaware River, Philadelphia to the Sea NJ, PA & DE project; the Delaware River, Philadelphia to Trenton, NJ & PA project; and the Delaware River Main Channel Deepening, NJ, PA & DE project; and several other active Federal navigation projects at major tributaries of the Delaware River.

Ecosystem restoration opportunities represent the greatest potential for the beneficial use of dredged material due to the significant environmental benefits including: revegetation of riparian and wetland resources; enhancing habitat value and the restoration of the ecosystem/habitat units-through restoration of scarce and important habitat types; increase nesting and foraging habitat for listed species; improve connectivity throughout the study areas and adjacent uplands; bank stabilization and a reduction in shoreline retreat, and; overall restoration of ecological, cultural and aesthetic resources through improvements in ecosystem functionality, vegetation and wildlife.

Benefits will also be realized for recreation, flood risk management, and navigation including reducing the amount of dredged material placed in confined disposal facilities (CDFs). As navigation is an output with high budgetary priority and regional sediment management (RSM) is a congressionally authorized process to address placement and beneficial use of dredged materials for federal navigation channels, there is Federal interest in conducting the feasibility study as described in the authorizing language. Currently, approximately 3.0 million cubic yards of dredged sediment is placed in upland disposal areas annually while large areas of habitat are lost every year.

Specific beneficial use opportunities most suited for feasibility phase analysis in New Jersey include shoreline ecosystem restoration and enhancement opportunities at several sites including Camden Waterfront/Cramer Hill Park and Maurice River Township.

Based on the preliminary screening of alternatives, the above-mentioned ecosystem restoration beneficial use opportunities are consistent with Army policies regarding costs, benefits, and environmental impacts, and are recommended for feasibility phase analyses. This screening enhances the ability of both potential sponsor(s) and the U.S. Army Corps of Engineers (USACE) to effectively manage the study efforts through the determination of specific study areas to suit unique agency goals.

A more detailed analysis considering project implementation timeframe/scope, contributions to RSM opportunities, constraints, potential benefits, and potential sponsor support has been conducted as part of this study to identify prioritized beneficial use opportunities and projects. Studies which have the best chance of proceeding to the feasibility phase are presented herein.

The USACE was authorized to conduct the Delaware River, PA, NJ and DE Dredged Material Utilization Reconnaissance Study and any ensuing feasibility investigations by a resolution of the Senate Committee on Environment and Public Works on October 26, 2005. The resolution directs the USACE to conduct an investigation of the numerous beneficial uses of dredged material within the Delaware River and Estuary area.

This study aims to determine whether Federal interest exists in proceeding to feasibility phase investigations and to identify a non-Federal sponsor willing to cost-share the feasibility phase in

accordance with a Feasibility Cost Share Agreement (FCSA) with the USACE. A Project Management Plan (PMP) for feasibility phase investigations is being developed separately and this RP will be a component of that PMP.

A Letter of Intent has been received from the New Jersey Department of Environmental Protection (NJDEP) who is interested in serving as the non-Federal Sponsor for a feasibility study for ecosystem restoration.

Factors Affecting the Scope and Level of Review. The New Jersey Beneficial Use of Dredged Material for the Delaware River Feasibility Study has been determined to be of low to moderate risk for the factors listed below. The ATR team should focus on the technical analysis, hydrology/hydraulic analysis and development of alternatives to assure quality control in the projects forwarded for Major Subordinate Command (MSC) consideration.

- Most aspects of the study will not be technically challenging; similar repair measures have been successfully engineered and implemented on similar projects in the area and at other locations around the country.
- There is a moderate level of uncertainty associated with this study. The hydraulic/hydrologic and economic analyses performed during the feasibility study was put through a rigorous peer reviewed Risk and Uncertainty Analysis.
- Implementation of a flood risk management project could potentially reduce flood related risks to human life/safety. The overall study has limited risks and will most likely be a very traditional flood risk management project. The study evaluated both structural and non-structural flood risk management measures including, relocation, beach nourishment and hardened structures. Non-performance or design exceedance of these measures could result in risks to life safety. If a flood barrier were to be overtopped, the benefited area, including critical infrastructure and the population would be at risk; however, there would likely be adequate warning time to allow preparation or evacuation before flooding occurs. The District Chief of Engineering has not determined that there is a potential for significant life safety risk associated with some of the measures being considered in the event of non-performance or design exceedance.
- An independent peer review by independent experts has not been initiated.
- The study is not likely to involve significant public dispute as to the size, nature, or effects of the project. The project delivery team (PDT) has conducted a series of three meetings with elected officials and three open house meetings with the general public. Information was provided about plan formulation and the results of the initial screening, along with conceptual alternatives. The PDT received no comments involving significant concerns or requested changes.
- The study is not likely to involve significant public dispute as to the economic or environmental cost or benefit of the project. The project delivery team (PDT) has conducted a series of three meetings with elected officials and three open house meetings with the general public. Information was provided about preliminary benefit/cost ratios, as well as environmental aspects of the project. The PDT received no comments involving significant concerns or requested changes.
- The information in the decision document 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.

- At this early stage, it is unknown to what degree the project design will require redundancy, resiliency, and/or robustness. However, these qualities will be built into the range of storm damage reduction alternatives considered as part of the study.

In-Kind Contributions. Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, and IEPR. No in-kind products and analyses are to be provided by the non-Federal sponsor. The non-Federal sponsor's cost share is being provided through cash contributions and no in-kind services have been provided.

4. DISTRICT QUALITY CONTROL (DQC)

All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). The home district shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home MSC.

a. **Documentation of DQC.** A District Quality Control Review (DQCR) will be conducted on all completed study documents prior to ATR. The ATR team will be provided access to the DQC comments and responses. District quality control documents that review contractor work and have previously been created in Microsoft Word will be provided to the ATR team through attachment in DrChecks. All future contractor work will be documented and posted in DrChecks. For work conducted in-house, technical supervisors are assuring that experienced personnel, who have been involved with similar work, are checking team members' technical work for completeness, accuracy and clarity. DQC of all in-house work will be documented in DrChecks. At a minimum a comment citing all DQC reviews will be placed in DrChecks that states the review has been performed and all comments have been adequately addressed. Any major comment regarding the documents will also be placed in DrChecks. Comments minor in nature will be provided to the PDT and addressed outside of DrChecks.

5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside the home MSC.

a. **Products to Undergo ATR.** The feasibility study will be conducted in phases. ATR will occur on documentation leading up to, and including, the tentatively selected plan and NEPA documentation.

b. **Required ATR Team Expertise.** The expertise represented on the ATR team reflects the significant expertise involved in the work effort and generally mirrors the expertise on the PDT. The ATR Team Leader will follow the requirements outlined in the "ATR Lead Checklist" developed by the National Planning Centers of Expertise. The following table provides a list of disciplines included on the ATR team and descriptions of the expertise required. At this time it is not certain that GeoEnvironmental expertise will be needed.

ATR Team Members/Disciplines	Expertise Required
ATR Lead: Sheridan Wiley, SWG	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, environmental resources, etc).
Planning: Jonas White, SAM	The Planning reviewer should be a senior water resources planner with experience in the formulation aspect of flood risk management studies.
Economics : TBD	The Economics reviewer should be a senior level economist with experience in evaluating the benefits and costs associated with a flood risk management study, including the use of HEC-FDA.
Environmental Resources Michael Malsom, SAM	The Environmental reviewer should be a senior biologist with experience in ecosystem restoration opportunities associated with flood risk management studies, especially tidal wetland enhancement. They should also have expertise in NEPA compliance.
Cultural Resources Matthew Grunewald, SAM	The Cultural Resources reviewer should be a senior archaeologist.
Hydrology	The Hydrology review should be a senior level hydrologic engineer with experience in flood risk management studies and the development of flow and stage frequency curves.
Hydraulic Engineering: Michael Wutkowski, SAW	The Hydraulic Engineering reviewer should be an expert in the field of hydraulics and have a thorough understanding and knowledge of open channel dynamics, enclosed channel systems, application of detention/retention basins, application of levees and flood walls, interior drainage, non-structural solutions involving flood warning systems and flood proofing, etc and/or computer modeling techniques that will be used such as HEC-RAS and HEC-HMS.
Risk Analysis: TBD	The risk analysis reviewer will be experienced with performing and presenting risk analyses in accordance with ER 1105-2-101 and other related guidance, including familiarity with how information from the various disciplines involved in the analysis interact and affect the results.
Geotechnical Engineering: Ben Lackey, SAW	The Geotechnical reviewer should be a senior geotechnical engineer familiar with the geotechnical requirements of structural and nonstructural flood risk management measures.

Civil Engineering	The Civil Engineering reviewer should be a senior civil engineer familiar with structural and nonstructural flood risk management measures.
Cost Engineering: Jim Neubauer, NWW	The Cost Engineering reviewer should be a senior cost engineer.
Real Estate: Erin Clark, MVN	The Real Estate representative should be an expert in real estate acquisition and appraisals.
GeoEnvironmental: TBD	The GeoEnvironmental expert, if needed as a team member, should be familiar with RCRA and CERCLA.

c. **Documentation of ATR.** DrChecks review software will be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure adequacy of the product. The four key parts of a quality review comment will normally include:

(1) The review concern – identify the product's information deficiency or incorrect application of policy, guidance, or procedures;
(2) The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not be properly followed;
(3) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and
(4) The probable specific action needed to resolve the concern – identify the action(s) that the reporting officers must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, comments may seek clarification in order to then assess whether further specific concerns may exist.

The ATR documentation in DrChecks will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, RMO, MSC, and HQUSACE), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-1-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR review, the ATR Team Leader will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;

- Describe the nature of their review and their findings and conclusions;
- Identify and summarize each unresolved issue (if any); and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The RMO will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A Statement of Technical Review should be completed, based on work reviewed to date, for the AFB, draft report, and final report. A sample Statement of Technical Review is included in Attachment 2.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

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 1165-2-214, is made as to whether IEPR is appropriate. IEPR panels typically 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. There are two types of IEPR:

- Type I IEPR. Type I IEPR reviews are managed outside the USACE and are conducted on project studies. Type I IEPR panels assess the adequacy and acceptability of the economic and environmental assumptions and projections, project evaluation data, economic analysis, environmental analyses, engineering analyses, formulation of alternative plans, methods for integrating risk and uncertainty, models used in the evaluation of environmental impacts of proposed projects, and biological opinions of the project study. Type I IEPR will cover the entire decision document or action and will address all underlying engineering, economics, and environmental work, not just one aspect of the study. For decision documents where a Type II IEPR (Safety Assurance Review) is anticipated during project implementation, safety assurance shall also be addressed during the Type I IEPR per EC 1165-2-214.

- Type II IEPR. Type II IEPR, or Safety Assurance Review (SAR), are managed outside the USACE and are conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels will conduct reviews of the design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.

Decision on IEPR. Application of an IEPR requires a risk informed decision considering the following factors (Appendix D of EC 1165-2-214):

a) The consequences of nonperformance on project economics, the environment, and social well-being (public safety and social justice).

b) Whether the product is likely to contain influential scientific information or be highly influential scientific assessment.

c) If and how the study meets any of the possible IEPR exclusions described in Paragraph 11.d. (3) and Appendix D of EC 1165-2-214.

d) If and how the study contains a mandatory triggers for IEPR.

a. This study meets all of the IEPR exclusion criteria. Because of the lack of potential risks associated with the study, Type I IEPR is not recommended for this project. This study will not be subject to Type I IEPR on the basis of potential life safety risks. The general purpose of the IEPR is to consider the adequacy, appropriateness, and acceptability of the design in assuring public health, safety, and welfare. Type II IEPR or Safety Assurance Review (SAR) is not anticipated to be required on project design and implementation document. As such, SAR will not be done in type I IEPR for the Feasibility Study. In conclusion, IEPR is not recommended for this project as it does not meet any of the following triggers: Study is under $45 million; the Corps and industry has ample experience to treat the activity as routine, and; there is minimal life safety risk.

b. **Products to Undergo Type I IEPR.** Not Applicable

c. **Required Type I IEPR Panel Expertise.** Not Applicable

d. **Documentation of Type I IEPR.** Not Applicable

An IEPR exclusion request will be prepared and submitted to NAD and HQ for IEPR decision.

7. POLICY AND LEGAL COMPLIANCE REVIEW

All decision documents will be reviewed throughout the study process for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in 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 home MSC Commander. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings in decision documents.

8. COST ENGINEERING AND ATR MANDATORY CENTER OF EXPERTISE (MCX) REVIEW AND CERTIFICATION

All decision documents shall be coordinated with the Cost Engineering MCX, located in the Walla Walla District. The MCX will assist in determining the expertise needed on the ATR team and in the development of the review charge(s), and the MCX will also provide the Cost Engineering certification. The RMO is responsible for coordination with the Cost Engineering MCX

9. MODEL CERTIFICATION AND APPROVAL

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. Planning models, for the purposes of the EC, are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The use of a certified/approved planning model does not constitute technical review of the planning product. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

EC 1105-2-412 does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue and the professional practice of documenting the application of the software and modeling results will be followed. As part of the USACE Scientific and Engineering Technology (SET) Initiative, many engineering models have been identified as preferred or acceptable for use on Corps studies and these models should be used whenever appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

a. **Planning Models.** The following planning models are anticipated to be used in the development of the decision document:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Certification / Approval Status
HEC-FDA 1.2.5 (Flood Damage Analysis)	The Hydrologic Engineering Center's Flood Damage Reduction Analysis (HEC-FDA) program provides the capability for integrated hydrologic engineering and economic analysis for formulating and evaluating flood risk management plans using risk-based analysis methods. The program will be used to evaluate and compare the future without- and with-project plans along the Delaware River to aid in the selection of a recommended plan to manage flood risk.	Certified
Cost-Dam		Approved

10. REVIEW SCHEDULES AND COSTS

ATR Scope and Cost. The ATRT will be part of the integrated study team and ATR will be an ongoing process. The ATRT will be involved in the Planning SMART process and will be informed/involved in all milestones. Invitations will be forwarded for all Charettes, In-Progress Review (IPR) meetings and other critical meetings. Specifically, the ATRT will review the following documents (with costs) associated with the Planning SMART milestones/meetings:

-Alternatives milestone

-TSP milestone
-Risk register and decision log IPR
-Value Engineering documentation
-Draft feasibility report
-Agency decision milestone
-Final report
-Chief's report/CWRB involvement

The total ATR budget is estimated at $65,000 at this time.

For each ATR review, the following schedule will be adhered to: 2 weeks for the ATR team to provide comments, 2 weeks for the PDT to coordinate and provide responses, and 2 weeks for back check and close-out of the ATR.

a. **Type I IEPR Scope and Cost.** Not Applicable

b. **Model Certification/Approval Schedule and Cost.** The models anticipated to be used are already certified or approved for use. Coordination with the appropriate PCX or the RMC for the model(s) in question will be conducted during to study and costs will be deferred at that time.

11. PUBLIC PARTICIPATION

A public scoping meeting will be held early in the process to be consistent with the National Environmental Policy Act (NEPA). Once completed, the Draft Integrated Feasibility Report will be disseminated to resource agencies, interest groups, and the public as part of the National Environmental Policy Act (NEPA) environmental compliance review. All significant and relevant public comments will be provided as part of the review package to Peer Reviewers as they are available and may include but not be limited to: final decision document, and associated review reports, A State/agency review will also be performed at the final report milestone.

The nomination of peer reviewers will not be considered by recommendations from the public, including scientific or professional societies. Peer reviewers will be selected by the RMO.

12. REVIEW PLAN APPROVAL AND UPDATES

The North Atlantic Division Commander is responsible for approving this Review Plan. The Commander's approval reflects vertical team input (involving district, MSC, RMO, and HQUSACE members) as to the appropriate scope and level of review for the decision document. Like the PMP, the Review Plan is a living document and may change as the study progresses. The home district is responsible for keeping the Review Plan up to date. Minor changes to the review plan since the last MSC Commander approval are documented in Attachment 3. Significant changes to the Review Plan (such as changes to the scope and/or level of review) should be re-approved by the MSC Commander following the process used for initially approving the plan. The latest version of the Review Plan, along with the Commanders' approval memorandum, should be posted on the Home District's, the RMO's, and home MSC's respective websites.

13. REVIEW PLAN POINTS OF CONTACT

Public questions and/or comments on this review plan can be directed to the following points of contact:

- Philadelphia District, Project Manager, 215.656.6579
- MSC: North Atlantic Division, 347.370.4566
- Review Management Organization: Deep Draft Navigation Planning Center of Expertise, 251-694-3804.

ATTACHMENT 1: TEAM ROSTERS

PDT			
Discipline	**Name**	**Phone**	**Email**
NAD POC	Hank Gruber	347-370-4566	henry.w.gruber@usace.army.mil
Project Manager	J. Bailey Smith	215-656-6579	j.b.smith@usace.army.mil
NJDEP	Ben Kieser	732-255-0767	benjamin.keiser@dep.state.nj.us
Economics	Sharon Grayson	215-656-6563	sharon.t.grayson@usace.army.mil
Hydrology & Hydraulics	Rob Lowinski	215-656-6690	robert.a.lowinski@usace.army.mil
Geotechnical	Chuck Sutphen	215-656-6697	charles.f.sutphen@usace.army.mil
Civil	Alyssa Dunlap	215-656-6651	alysssa.d.dunlap@usace.army.mil
Environmental	Beth Brandreth	215-656-6558	mary.e.brandreth@usace.army.mil
Operations	Tim Rooney	215-656-6592	timothy.j.rooney@usace.army.mil
Cost Engineer	Bill Welk	215-656-6636	william.w.welk@usace.army.mil
Cultural Resources	Nikki Minnichbach	215-656-6556	nichole.c.minnichbach@usace.army.mil
Real Estate	Heather Sachs	410-962-4648	heather.sachs@usace.army.mil
GIS	Beth Adams	215-656-6719	beth.b.adams@usace.army.mil

ATR Team (The ATR Team will be selected prior to the scheduled start of the ATR)			
Discipline	**Name**	**Phone**	**Email**
ATR Lead	TBD		
Planner	TBD		
Economics	TBD		
Environmental	TBD		
Hydrology & Hydraulics	TBD		
Risk Analysis	TBD		
Geotechnical	TBD		
Civil Engineering	TBD		
Real Estate	TBD		
Cost Engineering	TBD		
GeoEnvironmental	TBD		
Cultural Resources	TBD		

ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the New Jersey Beneficial Use of Dredged Material for the Delaware River Feasibility Study. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-214. 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 DrChecks[sm].

SIGNATURE _____ _____

Name Date
ATR Team Leader
Office Symbol/Company

SIGNATURE _____ _____

Name Date
Project Manager
Office Symbol

SIGNATURE _____ _____

Name Date
Architect Engineer Project Manager[1]
Company, location

SIGNATURE _____ _____

Name Date
Review Management Office Representative
Office Symbol

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: *Describe the major technical concerns and their resolution.*

As noted above, all concerns resulting from the ATR of the project have been fully resolved.

SIGNATURE _____ _____

Name Date
Chief, Engineering Division
Office Symbol

SIGNATURE _____ _____

Name Date
Chief, Planning Division
Office Symbol

[1] Only needed if some portion of the ATR was contracted

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

Term	Definition	Term	Definition
AFB	Alternative Formulation Briefing	NED	National Economic Development
ASA(CW)	Assistant Secretary of the Army for Civil Works	NER	National Ecosystem Restoration
ATR	Agency Technical Review	NEPA	National Environmental Policy Act
CSDR	Coastal Storm Damage Reduction	O&M	Operation and maintenance
DPR	Detailed Project Report	OMB	Office and Management and Budget
DQC	District Quality Control/Quality Assurance	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
EA	Environmental Assessment	OEO	Outside Eligible Organization
EC	Engineer Circular	OSE	Other Social Effects
EIS	Environmental Impact Statement	PCX	Planning Center of Expertise
EO	Executive Order	PDT	Project Delivery Team
ER	Ecosystem Restoration	PAC	Post Authorization Change
FDR	Flood Damage Reduction	PMP	Project Management Plan
FEMA	Federal Emergency Management Agency	PL	Public Law
FRM	Flood Risk Management	QMP	Quality Management Plan
FSM	Feasibility Scoping Meeting	QA	Quality Assurance
GRR	General Reevaluation Report	QC	Quality Control
Home District/MSC	The District or MSC responsible for the preparation of the decision document	RED	Regional Economic Development
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RMC	Risk Management Center
IEPR	Independent External Peer Review	RMO	Review Management Organization
ITR	Independent Technical Review	RTS	Regional Technical Specialist
LRR	Limited Reevaluation Report	SAR	Safety Assurance Review
MCX	Mandatory Center of Expertise	USACE	U.S. Army Corps of Engineers
MSC	Major Subordinate Command	WRDA	Water Resources Development Act