



DEPARTMENT OF THE ARMY  
US ARMY ENGINEER DIVISION, SOUTHWESTERN  
1100 COMMERCE STREET, SUITE 831  
DALLAS TX 75242-1317

REPLY TO  
ATTENTION OF

27 OCT 2016

CESWD-PDP

MEMORANDUM FOR Commander, Galveston District, P.O. Box 1229 Galveston, TX 77553

SUBJECT: Freeport Harbor Channel Improvement Project, General Reevaluation Report and Environmental Assessment (Freeport GRR-EA) - Review Plan Approval

1. References:

- a. EC 1165-2-214, Civil Works Review Policy, 15 December 2012.
- b. Memorandum, CESWG-DE, 22 September 2016, subject: Freeport GRR-EA - Review Plan Approval (Encl 1).
- c. Memorandum, CESAM-PD-D, 9 September 2016, subject: Review Plan Approval, Freeport GRR-EA, Freeport, Texas (Encl 2).

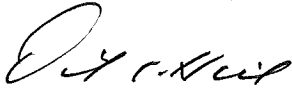
2. In accordance with reference 1.a., I hereby approve the enclosed Review Plan (RP) for the subject project study.

3. The RP has been prepared in accordance with the referenced guidance and has been reviewed and cleared for approval by the Deep Draft Navigation Planning Center of Expertise (DDN-PCX) (Encl 2). An Independent External Peer Review is required and public comments received will be incorporated into the plan as the study progresses.

4. Please post the final approved RP with a copy of this memorandum to the District's public internet website and provide the internet address to the DDN-PCX and Southwestern Division. Before posting to the District website, the names of USACE employees should be removed from the RP.

5. The SWD point of contact for this action is Mr. M. Tyler Henry, CESWD-PDP, at 469-487-7065.

2 Encls

  
DAVID C. HILL  
Brigadier General, USA  
Commanding



DEPARTMENT OF THE ARMY  
GALVESTON DISTRICT, CORPS OF ENGINEERS  
P. O. BOX 1229  
GALVESTON TX 77553-1229

End 1

CESWG-DE

SEP 22 2016

MEMORANDUM FOR Commander, Southwestern Division , ATTN: CESWD-PDP  
(Moyer), 1100 Commerce Street, Dallas, Texas 75242-0216

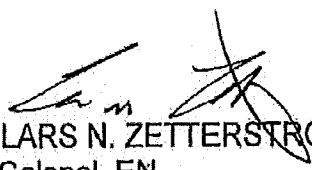
SUBJECT: Freeport Harbor Channel Improvement Project, General Reevaluation  
Report and Environmental Assessment (Freeport GRR-EA) - Approval of Review  
Plan

1. References:

- a. EC 1165-2-214, Civil Works Review Policy, 15 December 2014
  - b. PB 2016-02, Civil Works Review, 4 March 2016
  - c. Memorandum, DDNPCX, 9 September 2016, Subject: Review Plan  
(RP) Approval, Freeport Harbor Channel Improvement Project,  
General Reevaluation Report (GRR) and Environmental Assessment  
(EA) Freeport, Texas
2. In accordance with reference 1.a. and 1.b., enclosed is the subject study's RP  
for Southwestern Division review and approval.
3. Please furnish the RP approval memorandum to Project Manager, Nicholas  
Laskowski. Once approved, the RP will be posted to the District's website as  
required by guidance.
4. If you have any questions or require additional information please contact  
Nicholas Laskowski at [nicholas.a.laskowski@usace.army.mil](mailto:nicholas.a.laskowski@usace.army.mil) or 409-766-  
3168, or Deputy Chief of Project Management, Sharon Tirpak at  
[sharon.m.tirpak@usace.army.mil](mailto:sharon.m.tirpak@usace.army.mil) or 409-766- 3136.

3 Encls

1. Review Plan Transmittal Memo
2. FHCIP GRR Review Plan
3. Review Plan Checklist

  
LARS N. ZETTERSTROM, P.E.  
Colonel, EN  
Commanding

CESAM-PD-D

9 September 2016

SUBJECT: Review Plan (RP) Approval, Freeport Harbor Channel Improvement Project,  
General Reevaluation Report (GRR) and Environmental Assessment (EA), Freeport, Texas

5. The DDNPCX recommends the RP for approval by the Major Subordinate Command (MSC) Commander. Following approval, the District is requested to provide the DDNPCX with a copy of the MSC Commander's Approval Memorandum and a link to where the RP is posted on the District website. Prior to posting, the names of individuals identified in the RP should be removed.

6. Thank you for the opportunity to assist in the preparation of the RP. Please coordinate any Agency Technical Review and Independent External Peer Review efforts outlined in the RP with the undersigned at (251) 694-3842.

OTTO,KIMBERLY, Digitally signed by  
OTTO,KIMBERLY,PERSONS,123077994  
DN: c=US, o=U.S. Government, ou=DoD,  
ou=PD, cn=USA,  
email=OTTO,KIMBERLY,PERSONS,12307799  
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9984 Date: 2016.09.09 02:30:54 -0500

Encls

KIMBERLY P. OTTO  
Review Manager, DDNPCX

CF:

CESWF-PEC-P/HEINLY, HARPER

CESWG-PM-J/LASKOWSKI

CEIWR-RMC-WD/CLARKSON

CEMVK-EC-DL/HERR

CENAD-PD-X/COCCHIERI

CESAD-PDP/BUSH, SMALL, STRATTON



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
US ARMY CORPS OF ENGINEERS  
SOUTH ATLANTIC DIVISION  
60 FORSYTH STREET SW, ROOM 10M15  
ATLANTA, GA 30303-8801

End 2

CESAM-PD-D

9 September 2016

MEMORANDUM FOR MS. T. CHERYL JAYNES (CESWF-PEC-PF) U.S. ARMY CORPS OF ENGINEERS, GALVESTON DISTRICT, 2000 FORT POINT ROAD, GALVESTON, TEXAS 77550

SUBJECT: Review Plan (RP) Approval, Freeport Harbor Channel Improvement Project, General Reevaluation Report (GRR) and Environmental Assessment (EA), Freeport, Texas

1. The enclosed RP has been presented to the Deep Draft Navigation Planning Center of Expertise (DDNPCX) for its review and endorsement in accordance with Engineering Circular 1165-2-214, Civil Works Review, dated 15 December 2012.
2. The Freeport Harbor Channel Improvement Project GRR and EA will result in reevaluation of feasibility efforts authorized by Section 7002 of the Water Resources Reform and Development Act of 2014. Efforts will be focused on channel deepening and widening within the limits of the authorized Federal project; however, bend easing at the channel segment adjacent to the area known as the Dow Thumb will also be evaluated. It is anticipated that proposed changes will not require Congressional authorization.
3. The Freeport Harbor Channel Improvement Project is a single purpose deep draft navigation study. Accordingly, the DDNPCX will serve as the Review Management Organization during the study phase of the project. Since the proposed project could impact the adjacent Freeport Hurricane Flood Protection Project (HFPP), the DDNPCX coordinated with the Risk Management Center (RMC), Mr. John Clarkson and Mr. Dustin Herr, and the Coastal Storm Risk Management Planning Center of Expertise (CSRMP-CX), Mr. Larry Cochieri, to ensure that proposed efforts addressed all review related requirements.
4. The RP was reviewed for technical sufficiency and policy compliance by Ms. Kim Otto, Review Manager for the DDNPCX; the RP checklist that documents the review is enclosed. Although an EA will be prepared and the estimated project cost is between \$50-60 million, Type I Independent External Peer Review (IEPR) will be undertaken during the study phase and Type II IEPR will be required during the implementation phase due to potential project impacts to the Freeport HFPP. The RMC will assume responsibility as RMO during the implementation phase of the project, to include review and endorsement of a new Review Plan and management of review efforts required during that project phase.



US Army Corps  
of Engineers ®

## REVIEW PLAN

Freeport Harbor Channel Improvement Project General Reevaluation Report  
and Environmental Assessment, Freeport, Texas (P2# 402197)

Galveston District

MSC Approval Date: Pending  
Last Revision Date: 6 September 2016

## REVIEW PLAN

Freeport Harbor Channel Improvement Project General Reevaluation Report and Environmental Assessment, Freeport, Texas (P2# 402197)

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## 1. PURPOSE AND REQUIREMENTS

- a. **Purpose.** This Review Plan defines the scope and level of peer review for the Freeport Harbor Channel Improvement Project, Draft Integrated General Reevaluation Report - Environmental Assessment, Brazoria County, Texas (Freeport DIGRR-EA). The study area is located immediately south of the City of Freeport, Texas, in Brazoria County.

*Previously Authorized Project:* Under Section 216 of the Flood Control Act of 1970, USACE prepared the *Freeport Harbor Channel Improvement Project Final Feasibility Report and Environmental Impact Statement* dated September 2012 (2012 Feasibility Report). The Chief of Engineers Report was signed 7 January 2013. The project recommended in the final feasibility report was authorized for construction in the Water Resources Reform and Development Act (WRRDA) of 2014. The WRRDA 2014 project has not yet been constructed.

The purpose of the Freeport DIGRR-EA is to recommend modifications to WRRDA 2014 to allow for safe and efficient transit of the 2012 Feasibility Report projected fleet of Panamax vessels through a constricted section of the Freeport Harbor Channel referred to as the waist of the DOW Thumb, to the Velasco Container Terminal. These modifications are referred to as the "First Segment of Construction" and will be evaluated as a separable element. Additionally, the Freeport DIGRR-EA will include an economic update of the WRRDA 2014 Project, inclusive of the GRR modifications.

The 2012 Feasibility Report provides for National Environmental Policy Act (NEPA) compliance for the WRRDA 2014 project. The Environmental Assessment (EA) for the Freeport DIGRR-EA will cover the impact areas of the GRR features, which are outside the footprint of the WRRDA 2014 project.

### b. References

- (1) Planning Bulletin (PB) 2016-2, Civil Works Review, 4 Mar 2016;
- (2) Engineering Circular (EC) 1165-2-214, Civil Works Review, 15 Dec 2012;
- (3) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011;
- (4) Engineering and Construction Bulletin No. 2016-9, CECW-CE, dated 04 Mar 2016;
- (5) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006;
- (6) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007;
- (7) FHCIP GRR Project Management Plan, March 2016;
- (8) District Quality Management Plan; and
- (9) Freeport GRR Feasibility Cost Sharing Agreement (FCSA)

- c. **Requirements.** This review plan was developed in accordance with EC 1165-2-214, and PB 2016-2, which provides the interim policy guidance for the expired EC 1165-2-214. EC 1165-2-214 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 Reviews. 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 PCX (DDNPCX).

The DDNPCX will coordinate with the Civil Works Cost Engineering and Agency Technical Review (ATR 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. Although the study is a single-purpose study (Deep Draft Navigation), the proposed plan has the potential to affect the adjacent Freeport Hurricane Flood Protection Project (HFPP) and as such, other PCX's will be involved in the review process. During the study phase the DDNPCX (RMO) will coordinate with the Risk Management Center (RMC) and the USACE National Planning Center for Coastal Storm Risk Management (CSRMC-PCX) to ensure that associated study efforts are properly addressed during study phase reviews (ATR and Type I IEPR).

## 3. STUDY INFORMATION

- a. **Decision Document.** The Freeport DIGRR-EA will be an integrated report prepared by the Galveston District (SWG) and the Regional Planning and Environmental Center (RPEC). It is expected the report would be approved under the discretionary authority of the Chief of Engineers for the project authorized by WRRDA 2014 and culminate in a Director's Report. It is not expected that the changes to the authorized project would require Congressional Authorization. Pursuant to the National Environmental Policy Act (NEPA), an EA will be integrated in the Draft GRR.
- b. **Study/Project Description.** The WRRDA 2014 project is comprised of four separable study reaches (Figure 1). The GRR will focus on Reach 2 and 3. The intent is to keep costs within the 902 Limit. Currently, the project cost is estimated at \$50M-\$60M.

The GRR study will evaluate the existing project channel widths and depths, along with potential bend easing to account for a constricted area referred to as the "Waist" or "DOW Thumb Pinch." This is a single purpose deep-draft navigation study. Economic analysis of the proposed modification will be required. The ultimate goal of the GRR is to identify modifications to the authorized project near the DOW Thumb to allow the projected fleet of Panamax container vessels to access the Velasco Container Terminal. The depth of the GRR features under the First Segment of Construction would be to 46 feet mean lower low water (MLLW). The "First Segment of Construction," includes the following actions or features:

- 1) Evaluate the authorized channel improvements in the Lower Stauffer channel, located in Reach 3, (approximately 19 MLLW) to a depth of 46 MLLW feet. The non-Federal Sponsor (NFS) intends to eventually deepen to the WRRDA 2014 authorized depth of 51-foot depth in this reach (authorized depths vary among economic (separable element) reaches;
- 2) Evaluate an optimized/maximized width of the channel through the "waist" at the DOW Thumb, to the extent that such widening can be accomplished with no impact (once avoided or mitigated) to the Hurricane Flood Protection Project (HFPP); and
- 3) Evaluate within Reach 2, a lower bend easing which would likely result in impacts to a wave barrier (part of the HFPP), and turning notch along the "Upper Turning Basin" to allow



vessels to align for passage through the “waist” area with tug assistance (including addressing the wave barrier impacts).

An economic update is required for the WRRDA 2014 authorized project in all four separable reaches. The modifications (proposed widening, bend easing, and turning notch) in Reach 2 will require a detailed (Level 4) economic update to be conducted on Reach 3 to account for the design refinements in Reach 2 proposed under this GRR. The GRR modifications are intended to address the concerns voiced by the Pilots and the Port concerning the safe and effective navigation of the Panamax vessel (965-foot LOA x 106 feet x44 feet) around the DOW Thumb (the major physical constraint on the Freeport Harbor Channel) located in Reach 2. The proposed GRR features, located in Reach 2, are necessary to navigate the Panamax vessel safely and efficiently through Reach 2 (around DOW Thumb) to ultimately arrive at the Velasco Container Terminal in Reach 3. A graphical layout of the project area is provided in Figure 1. The limits of the First Segment of Construction is in Reaches 2 and 3.

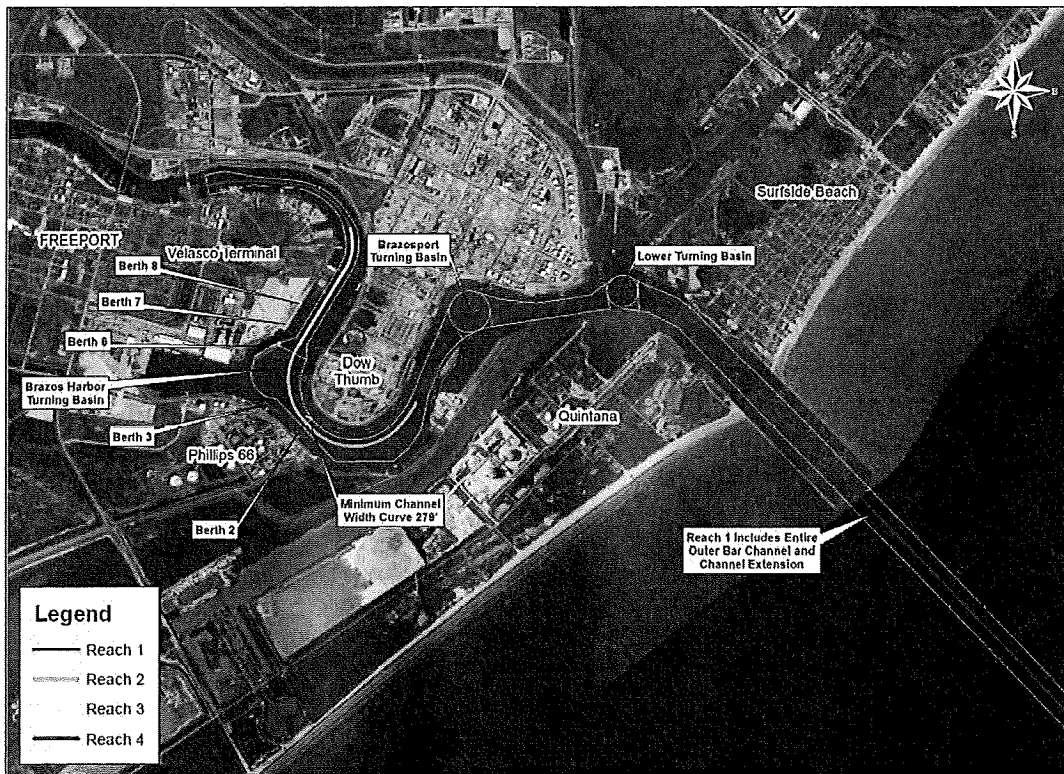


Figure 1. Freeport GRR Project Area

c. **Factors Affecting the Scope and Level of Review.** This study requires District Quality Review (DQC) and Agency Technical Review (ATR). If IEPR is needed, it will be conducted in accordance with EC 1165-2-214. Some of the factors considered, followed by an assessment to determine the appropriate level of review (*italicized*) are provided below.

- 1) **Will parts of the study likely be challenging?** *The project consists of proposed a bend easing, channel widening and upper Turning Basin notch, of which only the first two encroach upon the Freeport HFPP. The increase in channel width associated with this GRR is confined to the area of*

*the DOW Thumb within Reach 2. Increasing the channel width would involve removal of the underwater berm associated with the Freeport HFPP. The bend easing would involve cutting into the wave barrier portion of the Freeport HFPP (Reach 2) and the upper Turning Basin notch is comprised of deepening a portion of the approach channel to the Brazos Harbor portion of the Freeport Channel. The turning notch is not a part of the HFPP.*

- 2) **A preliminary assessment of where the project risks are likely to occur and what the magnitude of those risks might be.** *The project risks include encroachment of the project on the Freeport HFPP and the results of the economic analysis. The ship simulation conducted for the GRR confirmed that a Panamax sized vessel could safely navigate (with three-tug assistance) inbound and outbound if the channel is widened to a 400-foot wide channel, with construction of a bend easing and upper Turning Basin notch in Reach 2. An increase of the channel width and the bend easing would result in impacts to the Freeport HFPP (underwater berm around the Dow Thumb and wave barrier), neither of which protect populated areas.*

*In reference to economics, project risks pertain to 1) the economic justification of this GRR project; and 2) changes in market conditions (change from import to export) between the WRRDA 2014 project and present. The fleet growth assumptions and commodity forecasts are being reviewed and will be revised as appropriate. Although project justification is a risk, the proper analyses will be performed to ensure that resultant study recommendations are technically sound and economically justified.*

- 3) **Will the project be justified by life safety or is the project likely to involve significant threat to human life/safety assurance?** *The project would not be justified based on life safety nor is it expected to involve a significant threat to human life/safety assurance. However, because the project could affect features authorized under another Federal Project (the Freeport HFPP) and likely require some form of mitigation, Type I IEPR might be required for the GRR study. The Freeport HFPP in question is the hurricane flood levee along the DOW Thumb and the wave barrier along the southern portion of the Freeport Harbor Channel. Neither structure protects populated areas.*
- 4) **Has there been a request by the Governor of an affected state for a peer review by independent experts?** *There has not been a request by the Governor of Texas nor is it anticipated that the office of the Governor of Texas will request a peer review by independent experts.*
- 5) **Will there be significant public dispute as to the size, nature, or effects of the project?** *Per CEQ NEPA regulations (40 Part 1501.4(d)), formal scoping is done when an EIS is contemplated. Galveston District reviewed the potential for significant impacts and potential for controversy, and determined that since neither was likely, an environmental assessment would be prepared. The DIGRR-EA will be circulated for public review.*

*A potential for contaminated materials was discussed in making the decision to prepare an EA. One portion of the study area has been owned and used by a major chemical company for decades. However, the Hazardous, Toxic, and Radioactive Waste (HTRW) assessment performed for the same area for the authorized WRRDA 2014 Project, and a HTRW assessment recently conducted for the same area for the ongoing Sabine Pass to Galveston Bay Feasibility Study (S2G) identified no current or unresolved recent hazardous material releases in this area or areas*

nearby. Nevertheless, because of the land use history, and in an abundance of caution, the review plan identifies the potential for contaminated material at the DOW Thumb. All investigations to date have continued to support our initial conclusion that the risk of encountering contaminated materials was not sufficient to trigger an EIS. A recent sediment analysis of submerged material adjacent to the DOW Thumb has confirmed that contaminated sediments are not present in the area proposed for excavation for channel widening.

- 6) **Is the project/study is likely to involve significant public dispute as to the economic or environmental cost or benefit of the project?** *It is not anticipated that any significant public dispute as to the economic or environmental cost or benefit of the project would occur. Economic studies will be conducted using the approved HarborSym model to confirm the project depth(s) and verify that there are sufficient economic benefits. Environmental impacts are not expected to be significant (see paragraph 5 above) and environmental considerations will be documented in an EA in accordance with the NEPA. Public and stakeholder perspectives will be obtained when the Freeport DIGRR-EA is released for public review.*
- 7) **Is the information in the decision document or anticipated project design 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?** *No, the project is a typical channel improvement project involving traditional methods of dredging and traditional placement of dredged material. The installation of the mitigating structure for impacts to the HFPP underwater berm it is but one of many engineering solutions available to strengthen (increase the factor of safety recommendation to current requirements) the foundation to accommodate the underwater berm removal. This methodology is considered to be an uncomplicated method of construction that is easier to build and can be done in a timely manner. Therefore, it is anticipated that there is minimal risk involved with the project. The final GRR and supporting documentation will contain standard engineering, economic, and environmental analyses and information. Novel methods will not be utilized and methods, models or conclusions will not be precedence setting or likely to change policy decisions.*
- 8) **Is the project design anticipated to require redundancy, resiliency, and/or robustness, unique construction sequencing, or a reduced or overlapping design construction schedule?** *The project design is not anticipated to require redundancy, resiliency, and/or robustness. The project will not propose unique construction sequencing, or a reduced or overlapping design construction schedule.*
- d. **In-Kind Contributions.** The sponsor is expected to provide the 50 percent of their feasibility cost share as work-in-kind (WIK) contributions. This includes accumulation and clean-up of Pilot Log data, the NEPA document, sediment testing, HTRW database search and air conformity, civil engineering duties, cost estimating, value engineering studies, hydrologic and hydraulic (H&H) engineering for the study (except for the storm-surge modeling to be performed by USACE), geotechnical design, ship simulation and project management estimated at approximately \$1.2 million. All products produced under WIK are also subject to reviews identified in this Review Plan including DQC, ATR, and IEPR.

**4. DISTRICT QUALITY CONTROL (DQC)**

All decision documents (draft and final); 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.** DQC shall be consistent with the PMP and the Southwestern Division (SWD) Quality Management Plan (QMP). DQC shall be completed on each deliverable prior to submission to the PM or planner for incorporation into the decision document. The Project Delivery Team (PDT) will also be responsible for a complete reading of the draft and final GRR/NEPA documents to assure the overall integrity of the report, technical appendices, and recommendations. A formal DQC review will be conducted on the DIGRR-EA and all DQC comments and responses shall be documented in DrChecks. A DQC lead should be identified for the DQC review. The DQC comment response report will be provided to the ATR team lead prior to the ATR kick-off meeting. A formal DQC will also be conducted on the Draft Final Report prior to final submission. All DQC comments shall be submitted to the MSC for their quality assurance.
- b. **Products to Undergo DQC.** DQC should review any technical assumptions, modeling parameters, and calculations as well as the content and format of the technical appendix and main report submitted and should take place at a minimum prior to the submittal to the vertical team prior to any SMART planning milestone. Additionally, any deliverables from contractors or products provided by the NFS should undergo DQC prior to being incorporated into the analysis used to generate technical information and products.
- c. **Required DQC Expertise.** DQC shall be conducted by the technical team member’s first line supervisor, a Regional Technical Specialist or a designated senior member of his/her staff. In the event products from outside sources are incorporated the first line supervisor may delegate this DQC to a technical team member (not involved with the project) if it is determined that he/she has sufficient experience, objectivity, and knowledge of USACE guidance to properly evaluate the models/documents.

DQC Team Members/Disciplines	Expertise Required
DQC Lead	The DQC lead should be a senior professional with extensive experience in preparing Civil Works decision documents and conducting DQC. The lead should also have the necessary skills and experience to lead a virtual team through the DQC process. The DQC lead may also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc.).
Plan Formulation	Team member should be a plan formulation subject matter expert, have extensive experience in the USACE planning process, and be knowledgeable of USACE policies and guidelines. Reviewer should be familiar with deep-draft navigation projects, water resources, watershed planning, and have experience relevant to issues associated with HFPP systems.
Economics	Team member should be an economics subject matter expert with extensive experience in deep-draft navigations projects, including a thorough understanding of HarborSym.

DQC Team Members/Disciplines	Expertise Required
Environmental Resources	Team member should be an environmental subject matter expert familiar with preparing, processing, and reviewing NEPA documents, and have experience with models identified in Section 9 of this Review Plan.
Cultural Resources	This project might not require this reviewer since cultural resources do not have a significant bearing on the planning in the GRR. If one is required, the member should demonstrate experience with archeological resources. The District (SWG) will coordinate with the RMO prior to the TSP to determine the need for a cultural resources ATR reviewer.

Hydrology & Hydraulic Engineering	Team member should be an H&H subject matter expert, demonstrate experience in risk-based storm surge and wave modeling, sea level rise, risk and uncertainty, sedimentation analysis, hydrodynamic modeling and have experience relevant to issues associated with deep-draft navigation, ship simulation and HFPP systems. The individual should be a certified PE.
Structural Engineer	Team member should be a structural subject matter expert with extensive experience in levee and floodwall design, pre- and post-construction evaluation, and rehabilitation. Team member should have a thorough understanding of structural measures to include, but not be limited to stability mitigation for levees. The individual should be a certified PE. <u>Additionally, since the study includes evaluation of impacts (and mitigation) to an existing HFPP this reviewer should also have experience with the USACE Levee Safety Program and risk assessments.</u>
Geotechnical Engineer	The geotechnical engineer should have experience with the classification, dredging, and disposal of dredged material. The geotechnical engineer should also be experienced in levee and floodwall design, having proper stability and seepage analysis experience.
Civil Engineering	Team member should be a civil design subject matter expert and have experience with deep-draft navigation and levee design, utility relocations, positive closure requirements, and interior drainage requirements. The individual should be a certified PE.
Cost Engineering	Team member should be familiar with cost estimating for similar projects in MCACES. Review includes construction schedules and contingencies for any document that requires cost certification. The team member will be a Certified Cost Technician, Certified Cost Consultant, or Certified Cost Engineer. As the Cost Engineering Mandatory Center of Expertise, Walla Walla District will assign this team member as part of a separate effort coordinated by the ATR team lead in conjunction with the SWG project manager.
Real Estate	Team members should be familiar with similar USACE Civil Works studies and projects.

**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 (DDNPCX in this case) 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. The public, including scientific or professional societies, will not be asked to nominate potential peer reviewers.

**a. Products to Undergo ATR.** All ATRs will be coordinated through the DDNPCX. The ATR will be accomplished by an independent entity outside the home district, within USACE, as designated by the PCX. The purpose of this review is to ensure the proper application of clearly established criteria, regulations, laws, codes, principles, and professional practices of all project decision documents. The intent is for an ATR to not only ensure technical analyses are correct, but also to ensure compliance with all pertinent USACE guidance and delivery of high quality products early in the study prior to HQUSACE review. ATR will be completed on the following documentation:

- (1) Draft Integrated GRR Report - EA (DIGRR-EA)
- (2) Final Integrated GRR Report - EA (FIGRR-EA)

**b. Required ATR Team Expertise.** 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. The ATR team will be chosen based on each individual’s qualifications and experience with similar projects and will be ATR certified by their respective Communities of Practice (CoPs) and/or Sub-CoPs, as applicable. Although one ATR team member is identified for each technical discipline, depending upon reviewer availability and knowledge, more than one reviewer may be required for a given discipline to ensure required expertise is obtained for the review. The DDNPCX is responsible for recruiting the ATR team lead and ATR team.

ATR Team Members/Disciplines	Expertise Required
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, environmental resources, etc.).
Plan Formulation	Team member should be a plan formulation subject matter expert, have extensive experience in the USACE planning process, and be knowledgeable of USACE policies and guidelines. Reviewer should be familiar with deep-draft navigation projects, water resources, watershed planning, and have experience relevant to issues associated with HFPP systems.
Economics	Team member should be an economics subject matter expert with extensive experience in deep-draft navigations projects, including a thorough understanding of HarborSym.

ATR Team Members/Disciplines	Expertise Required
Environmental Resources	Team member should be an environmental subject matter expert familiar with preparing, processing, and reviewing NEPA documents, and have experience with models identified in Section 9 of this Review Plan.
Cultural Resources	This project might not require this reviewer since cultural resources do not have a significant bearing on the planning in the GRR. If one is required, the member should demonstrate experience with archeological resources. The District (SWG) will coordinate with the RMO prior to the TSP to determine the need for a cultural resources ATR reviewer.

ATR Team Members/Disciplines	Expertise Required
Hydrology & Hydraulic Engineering	Team member should be an H&H subject matter expert, demonstrate experience in risk-based storm surge and wave modeling, sea level rise, risk and uncertainty, sedimentation analysis, hydrodynamic modeling and have experience relevant to issues associated with deep-draft navigation, ship simulation and HFPP systems. The individual should be a certified PE.
Structural Engineer	Team member should be a structural subject matter expert with extensive experience in levee and floodwall design, pre- and post-construction evaluation, and rehabilitation. Team member should have a thorough understanding of structural measures to include, but not be limited to stability mitigation for levees. The individual should be a certified PE. <u>Additionally, since the study includes evaluation of impacts (and mitigation) to an existing HFPP this reviewer should also have experience with the USACE Levee Safety Program and risk assessments.</u>
Geotechnical Engineer	The geotechnical engineer should have experience with the classification, dredging, and disposal of dredged material. The geotechnical engineer should also be experienced in levee and floodwall design, having proper stability and seepage analysis experience.
Civil Engineering	Team member should be a civil design subject matter expert and have experience with deep-draft navigation and levee design, utility relocations, positive closure requirements, and interior drainage requirements. The individual should be a certified PE.
Cost Engineering	Team member should be familiar with cost estimating for similar projects in MCACES. Review includes construction schedules and contingencies for any document that requires cost certification. The team member will be a Certified Cost Technician, Certified Cost Consultant, or Certified Cost Engineer. As the Cost Engineering Mandatory Center of Expertise, Walla Walla District will assign this team member as part of a separate effort coordinated by the ATR team lead in conjunction with the SWG project manager.
Real Estate	Team members should be familiar with similar USACE Civil Works studies and projects. RE ATR team member should be selected from the national Cop approved list of reviewers for commercial navigation projects.

It should be noted that the legal review is the responsibility of the USACE, SWG Office of Counsel and is not under the purview of the ATR team.

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 been 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 to 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, 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 resolution process for policy issues 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 effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and will:

- 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 ATR Lead 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 draft report, and final report. A sample Statement of Technical Review is included in Attachment 2.

## 6. 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 1165-2-214, 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. 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.
- a. **Decision on IEPR.** The risk informed decision on whether to perform a Type I IEPR for the GRR will be based on the following italicized items followed by the non-italicized District response.

*If the decision document meets the mandatory triggers for Type I IEPR described in Paragraph 11.d.(1) and Appendix D of EC 1165-2-214; and if it doesn't, then also:* The GRR project would affect another Federal project (Freeport HFPP) and require a mitigation structure. The Freeport HFPP levee underwater berm along the DOW Thumb and the wave barrier along the southern portion of the Freeport Harbor Channel would be affected, neither of which protect populated areas. The project cost is estimated as \$50M-\$60M for the GRR project, less than the \$200M trigger.

There has not been a request by the Governor of Texas nor is it anticipated that the office of the Governor of Texas will request a peer review by independent experts.

There has been no determination by the DCW or Chief of Engineers that Type I IEPR is warranted due to the project being controversial due to significant public dispute over the size, nature or effects of the project or the economic or environmental costs or benefits of the project.

*The consequences of non-performance on project economics, the environmental and social well-being (public safety and social justice);* The Economic studies will be conducted using the approved HarborSym model to confirm the project depth(s) and verify there are sufficient economic benefits. Environmental impacts are not expected to be significant (see paragraph 3.C.(5) for detailed information) and environmental considerations will be documented in an EA in accordance with the NEPA and will undergo public review to allow for public and agency comments. The GRR project is located in an industrial area.

*Whether the product is likely to contain influential scientific information or be highly influential scientific assessment; and;* The project is not likely to contain influential scientific information or be a highly influential scientific assessment

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

*The status of any request to conduct IEPR from a head of a Federal or state agency charged with reviewing the project, if applicable; and* No requests have been made from a head of a Federal or state agency charged with reviewing the project.

- *If the proposed project meets the criteria for conducting Type II IEPR described in Paragraph 2 of Appendix D of EC 1165-2-214, including:*

*if the Federal action is justified by life safety or failure of the project would pose a significant threat to human life;* The project is an industrial area and is not justified by life safety. The Freeport GRR project will in actuality, bring the current factor of safety on the levee around the DOW Thumb up to current requirements.

*if the project involves the use of innovative materials or techniques where the engineering is based on novel methods, presents complex challenges for interpretations, contains precedent-setting methods or models, or presents conclusions that are likely to change prevailing practices;* Project does not include any of the aforementioned (innovative materials, techniques, etc.).

*if the project has unique construction sequencing or a reduced or overlapping design construction schedule.* The project does not have unique construction sequencing or a reduced or overlapping design construction scheduled.

The DDNPCX will serve as the RMO during the study phase and coordinate with the RMC and CSRM-PCX to ensure that associated study efforts are properly addressed during the review process for both ATR and/ if Type I IEPR is triggered.

- b. Products to Undergo Type I IEPR.** If triggered, type I IEPR will be performed for the entire draft decision document, including supporting documentation (appendices). This review will be

conducted concurrently with the ATR, Public and Agency Review, Division QA Review and HQ Policy Review.

- c. **Type I IEPR Panel Expertise.** The expertise represented on the Type I IEPR panel may be similar to those on the ATR team, but may be more specifically focused and generally will not involve as many disciplines. At minimum, the panel should include the necessary expertise to assess the engineering, environmental, and economic adequacy of the decision document as required by EC 1165-2-214, Appendix D. The Outside Eligible Organization (OEO) will determine the final participants on the panel.

IEPR Panel Members/Disciplines	Expertise Required
Plan Formulation	A minimum of 10 years of demonstrated experience in public works planning with a Master's degree in a related field. The reviewer should be very familiar with USACE civil works planning policies, methodologies, and procedures.
Economics	The Economics Panel Member should have extensive experience related to economic analyses for deep-draft navigation projects. Knowledge of tools employed for economic analysis, risk analysis, and trade forecasts are required.
Environmental	The Environmental Panel Member should be an expert regarding NEPA compliance and deep-draft navigation projects and knowledgeable regarding environmental aspects of coastal systems and dredged material management.
Geotechnical Engineer	The Engineering Panel Member should be a geotechnical subject matter expert with extensive experience in levee and floodwall design, pre- and post-construction evaluation, and rehabilitation. This member should have a thorough understanding of structural measures to include, but not be limited to stability mitigation for levees. Lastly, the member needs experience relevant to issues associated with deep-draft navigation. The individual should be a certified PE.
H&H/Coastal Engineer	The H&H Engineer should be an expert with deep-draft navigation channel design and modification as well as coastal storm surge evaluations. The individual should be a certified PE.

- d. **Documentation of Type I IEPR.** The IEPR panel will be selected and managed by an Outside Eligible Organization (OEO) per EC 1165-2-214, Appendix D. Panel comments will be compiled by the OEO. Comments should address the adequacy and acceptability of the economic, engineering, and environmental methods, models, and analyses used. IEPR comments should generally include the same four key parts as described for ATR comments in Section 5.c above. The OEO will prepare a final Review Report that will accompany the publication of the final decision document and shall:

- 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; 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.

The final Review Report will be submitted by the OEO no later than 60 days following the close of the public comment period for the draft decision document. USACE shall consider all recommendations contained in the Review Report and prepare a written response for all recommendations adopted or not adopted. The final decision document will summarize the Review Report and USACE response. The Review Report and USACE response will be made available to the public, including through electronic means on the internet.

## **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. CIVIL WORKS COST ENGINEERING AND AGENCY TECHNICAL REVIEW MANDATORY CENTER OF EXPERTISE REVIEW AND CERTIFICATION (MCX)**

All decision documents shall be coordinated with the MCX, located in the Walla Walla District. The MCX will assist in determining the expertise needed on the ATR team and Type I IEPR team (if applicable) and in the development of the review charge(s). The MCX will also provide the Cost Engineering MCX certification. The RMO is responsible for coordination with the 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
HarborSym	The program will be used to evaluate and compare the future without- and with-project plans for the FHCIP to aid in the selection of a plan to meet the study objectives.	Certified
The United States Fish and Wildlife Service (USFWS) Habitat Evaluation Procedure (HEP)	The USFWS HEP will be used to evaluate habitat conditions that would result from alternative plans. Habitat Suitability Index (HSI) models will be used for the mottled duck and great egret. These are approved models.	Approved for use

- b. **Engineering Models.** The following engineering 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	Approval Status
Ship Simulation	This model will simulate ship movement through various alternative scenarios. A two dimensional hydrodynamic model will be applied to the vicinity of the ship channel to generate currents for the ship simulator. The results will be used for determining a final design channel plan, which will be applied to the salinity models.	Approved for use; oversight by ERDC
GeoStudio & Slope/W	This model will be used for geotechnical stability analysis.	Approved for use
Mii - cost estimating models	Cost Engineering's model for developing cost.	Cost Engineering Approved Model
Crystal Ball Risk Based Analysis	Cost Engineering's model for determining risk in cost estimating.	Cost Engineering Approved Model
ADCIRC	System of computer programs used for prediction of storm surge and flooding	Approved for use
CMS-Wave	Spectral wave transformation numerical model, part of Coastal Modeling System (CMS)	Approved for use
STWAVE	Steady State spectral WAVE, half-plane model for nearshore wind-wave growth and propagation	Approved for use

**10. REVIEW SCHEDULES AND COSTS**

- a. **ATR Schedule and Cost.** ATR of the DIGRR-EA report will be performed concurrent to Public and Agency Review, Division QA Review, HQ Policy Review, and Type I IEPR. The following table shows preliminary cost estimates to conduct ATR. ATR will be completed on the DIGRR-EA and on the FIGRR-EA. Cost of the ATR is based on the following guidance from the DDNPCX.
- ATR of the draft document will be approximately \$5K per reviewer + \$3K for the ATR team lead + \$3.5K for the DDNPCX.
  - ATR of the final document will vary between \$3-\$5K per reviewer +\$3K for ATR lead +\$3.5K for DDNPCX

Estimated schedule for DQC and ATR				
Product	Start	Finish	Duration (days)	Estimated Cost
Draft GRR/EA (DQC) prior to TSP milestone	11 Jan 2017	08 Feb 2017	20	\$25,000
Draft GRR/EA (ATR) after TSP (concurrent with Public & Agency, and VT Reviews)	24 Feb 2017	09 April 2016	45	\$51,500
Final GRR/EA (DQC)	17 Oct 2017	14 Nov 2017	20	\$25,000
Final GRR/EA (ATR) after ADM	15 Nov 2017	28 Dec 2017	30	\$33,500
<b>Total Estimated Cost for DQC/ATR</b>				<b>\$135,000</b>

- b. **Type I IEPR Schedule and Cost.** Upon approval of this review plan by SWD, the need for IEPR and receipt of funding for the IEPR review, the District will initiate the IEPR Contract with the DDNPCX. The Type I IEPR contract will be awarded to begin IEPR concurrent with the ATR, Division QA Review, HQ Policy Review and Public and Agency Review. IEPR is estimated to cost \$150,000.
- c. **Model Certification/Approval Schedule and Cost.** All models utilized in this study are approved.

**11. PUBLIC PARTICIPATION**

The public will be able to comment on the GRR during the decision making process. A public meeting is not expected to be required for the study. The public review will occur after the TSP milestone, concurrent with ATR, IEPR, Division QA Review, and HQ Policy Review.

The public will have an opportunity to review and provide comments on the DIGRR-EA during the public review period, which will occur concurrently with the ATR, IEPR, QA Review, and Policy Review. The DIGRR-EA will be released for Public and Agency Review subsequent to the TSP milestone.

As required by EC 1165-2-214, the approved Review Plan will be posted on the Galveston District public website (<http://www.swg.usace.army.mil/Business-With-Us/Planning-Environmental-Branch/Planning-Section/>). This is not a formal comment period and there is no set timeframe for the opportunity for public comment. If and when comments are received, the PDT will consider them and decide if revisions to the review plan are necessary. This engagement will ensure that the peer review approach is responsive to the wide array of stakeholders and customers, both within and outside the Federal government.

## 12. REVIEW PLAN APPROVAL AND UPDATES

The Southwestern 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 webpage. The latest Review Plan should also be provided to the RMO (DDNPCX in this case) and home MSC.

## 13. REVIEW PLAN POINTS OF CONTACT

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

U.S. Army Corps of Engineers, Galveston District  
ATTN: Project Manager  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3168

U.S. Army Corps of Engineers, Southwestern  
Division  
ATTN: Senior Economist  
1100 Commerce Street, Suite 831  
Dallas, Texas 75242  
469-487-7065

U.S. Army Corps of Engineers, Regional  
Environmental and Planning Center  
ATTN: Planning Lead  
2000 Fort Point Road  
Galveston, Texas 77550  
409-766-3804

U.S. Army Corps of Engineers, Deep Draft  
Navigation Planning Center of Expertise  
ATTN: Review Management Organization  
P.O. Box 2288  
Mobile, Alabama 36628  
251-694-3842

US Army Corps of Engineers  
Risk Management Center  
12596 West Bayaud Ave., Suite 400  
Lakewood, CO 80228  
304-399-5217

**ATTACHMENT 1: TEAM ROSTERS**

<b>PDT Member</b>	<b>Role</b>	<b>Phone</b>	<b>E-mail</b>
Nick Laskowski	Project Management (SWG)	409-766-3168	<a href="mailto:nicholas.a.laskowski@usace.army.mil">nicholas.a.laskowski@usace.army.mil</a>
T. Cheryl Jaynes	Planning Lead (RPEC)	817-471-7573	<a href="mailto:cheryl.jaynes@usace.army.mil">cheryl.jaynes@usace.army.mil</a>
Bob Needham	Economics (RPEC)	409-766-6338	<a href="mailto:robert.a.needham@usace.army.mil">robert.a.needham@usace.army.mil</a>
Jan Stokes	NEPA/RTS (RPEC)	409-766-3039	<a href="mailto:janelle.s.stokes@usace.army.mil">janelle.s.stokes@usace.army.mil</a>
John Campbell	Cultural Resources (RPEC)	409-766-3878	<a href="mailto:john.a.campbell@usace.army.mil">john.a.campbell@usace.army.mil</a>
Carlos Tate	Civil Engineer Lead (SWG)	409-766-3819	<a href="mailto:carlos.d.tate@usace.army.mil">carlos.d.tate@usace.army.mil</a>
Sarah Xie-Desoto	Geo/Struc Engineer (SWG)	409-766-3172	<a href="mailto:sarah.h.xie-desoto@usace.army.mil">sarah.h.xie-desoto@usace.army.mil</a>
Mike Kauffman	H&H Engineer (SWG)	409-766-3104	<a href="mailto:michael.g.kauffman@usace.army.mil">michael.g.kauffman@usace.army.mil</a>
Adam Tallman	Cost Engineering (SWG)	409-766-3072	<a href="mailto:adam.d.tallman@usace.army.mil">adam.d.tallman@usace.army.mil</a>
Victor Otero	Real Estate (SWG)	409-766-3816	<a href="mailto:victor.l.otero@usace.army.mil">victor.l.otero@usace.army.mil</a>
Dennis Webb	Ship Simulation (ERDC)	601-634-2455	<a href="mailto:dennis.w.webb@usace.army.mil">dennis.w.webb@usace.army.mil</a>
Jeff Melby	Surge/Wave Modeling (ERDC)	601-634-2062	<a href="mailto:jeffrey.a.melby@usace.army.mil">jeffrey.a.melby@usace.army.mil</a>
Cheryl Montgomery	Env Risk Assessment (ERDC)	978-318-8644	<a href="mailto:cheryl.r.montgomery@usace.army.mil">cheryl.r.montgomery@usace.army.mil</a>
Fredalyn Colston	Programs/Scheduler (SWG)	409-766-3122	<a href="mailto:fredalyn.l.colston@usace.army.mil">fredalyn.l.colston@usace.army.mil</a>

<b>ATR Member</b>	<b>Role</b>	<b>Phone</b>	<b>Email</b>
TBD	ATR Lead		
TBD	Plan Formulation		
TBD	Economics		
TBD	Environmental /Cultural		
TBD	H&H Engineer		
TBD	Geo/Structural Engineer		
TBD	Civil Engineer		
TBD	Cost Engineering		
TBD	Real Estate		

<b>Vertical Team</b>	<b>Role</b>	<b>Phone</b>	<b>Email</b>
Becky Moyer	Chief, SWD Planning Division	469-487-7038	<a href="mailto:rebecca.j.moyer@usace.army.mil">rebecca.j.moyer@usace.army.mil</a>
Katie Williams	Regional Integration Team	202-761-0315	<a href="mailto:kathleen.a.williams@usace.army.mil">kathleen.a.williams@usace.army.mil</a>
Tyler Henry	SWD Senior Economist – QA Lead	469-487-7065	<a href="mailto:matthew.t.henry@usace.army.mil">matthew.t.henry@usace.army.mil</a>

<b>IEPR Panel Members</b>	<b>Role</b>	<b>Phone</b>	<b>Email</b>
TBD	Plan Formulation		
TBD	Economics		
TBD	Environmental		
TBD	Geotechnical /Structural Engineering		
TBD	H&H Coastal Engineer		



**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 *<type of product>* for *<project name and location>*. 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<sup>sm</sup>.

SIGNATURE

Name

ATR Team Leader

Office Symbol/Company

Date

SIGNATURE

Name

Project Manager

Office Symbol

Date

SIGNATURE

Name

Architect Engineer Project Manager<sup>1</sup>

Company, location

Date

SIGNATURE

Name

Review Management Office Representative

Office Symbol

Date

**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

Chief, Engineering Division

Office Symbol

Date

SIGNATURE

Name

Chief, Planning Division

Office Symbol

Date

<sup>1</sup> Only needed if some portion of the ATR was contracted

**ATTACHMENT 3: REVIEW PLAN REVISIONS**

<b>Revision Date</b>	<b>Description of Change</b>	<b>Page / Paragraph Number</b>

**ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS**

<u>Term</u>	<u>Definition</u>	<u>Term</u>	<u>Definition</u>
AFB	Alternative Formulation Briefing	NER	National Ecosystem Restoration
ASA(CW)	Assistant Secretary of the Army for Civil Works	NFS	Non-Federal Sponsor
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
DX	Directory of Expertise	OEO	Outside Eligible Organization
EA	Environmental Assessment	OSE	Other Social Effects
EC	Engineer Circular	PCX	Planning Center of Expertise
EIS	Environmental Impact Statement	PDT	Project Delivery Team
EO	Executive Order	PAC	Post Authorization Change
ER	Ecosystem Restoration	PMP	Project Management Plan
FDR	Flood Damage Reduction	PL	Public Law
FEMA	Federal Emergency Management Agency	QMP	Quality Management Plan
FRM	Flood Risk Management	QA	Quality Assurance
FSM	Feasibility Scoping Meeting	QC	Quality Control
GRR	General Reevaluation Report	RED	Regional Economic Development
Home District/MS	The District or MSC responsible for the preparation of the decision document	RMC	Risk Management Center
HQSACE	Headquarters, U.S. Army Corps of Engineers	RMO	Review Management Organization
IEPR	Independent External Peer Review	RTS	Regional Technical Specialist
ITR	Independent Technical Review	SAR	Safety Assurance Review
LRR	Limited Reevaluation Report	USACE	U.S. Army Corps of Engineers
MSC	Major Subordinate Command	WRDA	Water Resources Development Act
NED	National Economic Development		

## Review Plan Checklist For Decision Documents

**Date:** 8 September 2016

**Originating District:** Galveston (SWG)

**Project/Study Title:** Freeport Harbor Channel Improvement Project General Reevaluation Report and Environmental Assessment, Freeport, Texas

**PWI #:** P2#402197

**District POC:** Nick Laskowski (Project Manager) or Cheryl Jaynes (Planning Lead)

**PCX Reviewer:** Kim Otto

Please fill out this checklist and submit with the draft Review Plan when coordinating with the appropriate PCX. Any evaluation boxes checked 'No' indicate the RP may not comply with ER 1105-2-410 (22 Aug 2008) and should be explained. Additional coordination and issue resolution may be required prior to MSC approval of the Review Plan.

REQUIREMENT	REFERENCE	EVALUATION
<b>1. Is the Review Plan (RP) a stand alone document?</b>	EC 1105-2-410, Para 8a	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<ul style="list-style-type: none"> <li>a. Does it include a cover page identifying it as a RP and listing the project/study title, originating district or office, and date of the plan?</li> <li>b. Does it include a table of contents?</li> <li>c. Is the purpose of the RP clearly stated and EC 1105-2-410 referenced?</li> <li>d. Does it reference the Project Management Plan (PMP) of which the RP is a component?</li> <li>e. Does it succinctly describe the three levels of peer review: District Quality Control (DQC), Agency Technical Review (ATR), and Independent External Peer Review (IEPR)?</li> <li>f. Does it include a paragraph stating the title, subject, and purpose of the decision document to be reviewed?</li> <li>g. Does it list the names and disciplines of the Project Delivery Team (PDT)?*</li> </ul>	EC 1105-2-410, Appendix B, Para 4a	<ul style="list-style-type: none"> <li>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></li> <li>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></li> <li>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></li> <li>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></li> <li>e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></li> <li>f. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></li> <li>g. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></li> </ul> <p><b>Comments:</b></p>
<p><i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated.</i></p>		

<p><b>2. Is the RP detailed enough to assess the necessary level and focus of peer review?</b></p>	<p>EC 1105-2-410, Appendix B, Para 3a</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does it indicate which parts of the study will likely be challenging?</p> <p>b. Does it provide a preliminary assessment of where the project risks are likely to occur and what the magnitude of those risks might be?</p> <p>c. Does it indicate if the project/study will require preparation of an environmental impact statement (EIS)?</p> <p><i>Will an EIS be prepared? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></i> <i>If yes, IEPR is required.</i></p> <p>d. Does it address if the project report is likely to contain influential scientific information or be a highly influential scientific assessment?</p> <p><i>Is it likely? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></i> <i>If yes, IEPR is required.</i></p> <p>e. Does it address if the project is likely to have significant economic, environmental, and social affects to the nation, such as (but not limited to):</p> <ul style="list-style-type: none"> <li>• more than negligible adverse impacts on scarce or unique cultural, historic, or tribal resources?</li> <li>• substantial adverse impacts on fish and wildlife species or their habitat, prior to implementation of mitigation?</li> <li>• more than negligible adverse impact on species listed as endangered or threatened, or to the designated critical habitat of such species, under the Endangered Species Act, prior to implementation of mitigation?</li> </ul> <p><i>Is it likely? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></i> <i>If yes, IEPR is required.</i></p>	<p>EC 1105-2-410, Appendix B, Para 3a</p> <p>EC 1105-2-410, Appendix B, Para 3a</p> <p>EC 1105-2-410 Para 7c &amp; 8f</p> <p>EC 1105-2-410, Appendix B, Para 4b</p> <p>EC 1105-2-410, Para 6c</p> <p>EC 1105-2-410 Para 8f</p> <p>EC 1105-2-410 Para 8f</p> <p>EC 1105-2-410 Para 8f</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><b>Comments:</b></p>

<p>f. Does it address if the project/study is likely to have significant interagency interest?</p> <p><i>Is it likely? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></i>  <i>If yes, IEPR is required.</i></p> <p>g. Does it address if the project/study likely involves significant threat to human life (safety assurance)?</p> <p><i>Is it likely? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></i>  <i>If yes, IEPR is required.</i></p> <p>h. Does it provide an estimated total project cost?</p> <p><i>What is the estimated cost: \$50-\$60 million (best current estimate; may be a range)</i></p> <p><i>Is it &gt; \$45 million? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></i>  <i>If yes, IEPR is required.</i></p> <p>i. Does it address if the project/study will likely be highly controversial, such as if there will be a significant public dispute as to the size, nature, or effects of the project or to the economic or environmental costs or benefits of the project?</p> <p><i>Is it likely? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></i>  <i>If yes, IEPR is required.</i></p> <p>j. Does it address if the information in the decision document will likely be based on novel methods, present complex challenges for interpretation, contain precedent-setting methods or models, or present conclusions that are likely to change prevailing practices?</p> <p><i>Is it likely? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></i>  <i>If yes, IEPR is required.</i></p>	<p>EC 1105-2-410, Para 6c</p> <p>EC 1105-2-410, Appendix D, Para 1b</p> <p>EC 1105-2-410, Appendix D, Para 1b</p> <p>EC 1105-2-410, Appendix D, Para 1b</p> <p>EC 1105-2-410, Appendix D, Para 1b</p>	<p>f. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>g. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>h. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>i. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>j. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><b>Comments:</b> The new threshold for IEPR is \$200,000; however, we will be conducting an IEPR review for this project regardless of cost due to the potential for impacts to the Freeport Hurricane Flood Protection Project (HFPP).</p>
<p><b>3. Does the RP define the appropriate level of peer review for the project/study?</b></p>	<p>EC 1105-2-410, Para 8a</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does it state that DQC will be managed by the home district in accordance with the Major Subordinate Command (MSC) and district Quality Management Plans?</p>	<p>EC 1105-2-410, Para 7a</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

<p>b. Does it state that ATR will be conducted or managed by the lead PCX?</p> <p>c. Does it state whether IEPR will be performed?</p> <p><i>Will IEPR be performed? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></i></p> <p>d. Does it provide a defensible rationale for the decision on IEPR?</p> <p>e. Does it state that IEPR will be managed by an Outside Eligible Organization, external to the Corps of Engineers?</p>	<p>EC 1105-2-410, Appendix D, Para 3a</p> <p>EC 1105-2-410, Appendix B, Para 4b</p> <p>EC 1105-2-410, Para 7c</p>	<p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p><b>Comments:</b> Type I IEPR will be performed during study phase; Type II IEPR will be performed during implementation phase. IEPR was determined necessary due to potential impacts to the Freeport HFPP</p>
<p><b>4. Does the RP explain how ATR will be accomplished?</b></p>	<p>EC 1105-2-410, Appendix B, Para 4l</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does it identify the anticipated number of reviewers?</p> <p>b. Does it provide a succinct description of the primary disciplines or expertise needed for the review (not simply a list of disciplines)?</p> <p>c. Does it indicate that ATR team members will be from outside the home district?</p> <p>d. Does it indicate that the ATR team leader will be from outside the home MSC?</p> <p>e. Does the RP state that the lead PCX is responsible for identifying the ATR team members and indicate if candidates will be nominated by the home district/MSD?</p> <p>f. If the reviewers are listed by name, does the RP describe the qualifications and years of relevant experience of the ATR team members?*</p> <p><i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated.</i></p>	<p>EC 1105-2-410, Appendix B, Para 4f</p> <p>EC 1105-2-410, Appendix B, Para 4g</p> <p>EC 1105-2-410, Para 7b</p> <p>EC 1105-2-410, Para 7b</p> <p>EC 1105-2-410, Appendix B, Para 4k(1)</p> <p>EC 1105-2-410, Appendix B, Para 4k(1)</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>f. Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/></p> <p><b>Comments:</b></p>

<b>5. Does the RP explain how IEPR will be accomplished?</b>	EC 1105-2-410, Appendix B, Para 4k & Appendix D	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/>
a. Does it identify the anticipated number of reviewers?	EC 1105-2-410, Appendix B, Para 4f	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
b. Does it provide a succinct description of the primary disciplines or expertise needed for the review (not simply a list of disciplines)?	EC 1105-2-410, Appendix B, Para 4g	b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
c. Does it indicate that the IEPR reviewers will be selected by an Outside Eligible Organization and if candidates will be nominated by the Corps of Engineers?	EC 1105-2-410, Appendix B, Para 4k(1) & Appendix D, Para 2a	c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
d. Does it indicate the IEPR will address all the underlying planning, safety assurance, engineering, economic, and environmental analyses, not just one aspect of the project?	EC 1105-2-410, Para 7c	d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>6. Does the RP address peer review of sponsor in-kind contributions?</b>		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does the RP list the expected in-kind contributions to be provided by the sponsor?	EC 1105-2-410, Appendix B, Para 4j	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
b. Does it explain how peer review will be accomplished for those in-kind contributions?		b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/>
<b>7. Does the RP address how the peer review will be documented?</b>		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does the RP address the requirement to document ATR and IEPR comments using DrChecks?	EC 1105-2-410, Para 8g(1)	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
b. Does the RP explain how the IEPR will be documented in a Review Report?	EC1105-2-410, Appendix B, Para 4k(13)(b)	b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/>
c. Does the RP document how written responses to the IEPR Review Report will	EC 1105-2-410, Appendix B,	c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/>



<p>be prepared?</p> <p>d. Does the RP detail how the district/PCX will disseminate the final IEPR Review Report, USACE response, and all other materials related to the IEPR on the internet and include them in the applicable decision document?</p>	<p>Para 4l</p> <p>EC 1105-2-410, Para 8g(2) &amp; Appendix B, Para 4l</p>	<p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p><b>Comments:</b></p>
<p><b>8. Does the RP address Policy Compliance and Legal Review?</b></p>	<p>EC 1105-2-410, Para 7d</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><b>Comments:</b></p>
<p><b>9. Does the RP present the tasks, timing and sequence (including deferrals), and costs of reviews?</b></p>	<p>EC 1105-2-410, Appendix B, Para 4c &amp; Appendix C, Para 3d</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
<p>a. Does it provide a schedule for ATR including review of the Feasibility Scoping Meeting (FSM) materials, Alternative Formulation Briefing (AFB) materials, draft report, and final report?</p> <p>b. Does it include interim ATR reviews for key technical products?</p> <p>c. Does it present the timing and sequencing for IEPR?</p> <p>d. Does it include cost estimates for the peer reviews?</p>	<p>EC 1105-2-410, Appendix C, Para 3g</p> <p>EC 1105-2-410, Appendix C, Para 3g</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><b>Comments:</b></p>
<p><b>10. Does the RP indicate the study will address Safety Assurance factors?</b></p> <p>Factors to be considered include:</p> <ul style="list-style-type: none"> <li>• Where failure leads to significant threat to human life</li> <li>• Novel methods\complexity\ precedent-setting models\policy changing conclusions</li> <li>• Innovative materials or techniques</li> <li>• Design lacks redundancy, resiliency of robustness</li> <li>• Unique construction sequence or acquisition plans</li> </ul>	<p>EC 1105-2-410, Para 2 &amp; Appendix D, Para 1c</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p><b>Comments:</b></p>

<ul style="list-style-type: none"> <li>Reduced\overlapping design construction schedule</li> </ul>		
<b>11. Does the RP address model certification requirements?</b>	EC 1105-2-407	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does it list the models and data anticipated to be used in developing recommendations (including mitigation models)?</p> <p>b. Does it indicate the certification/approval status of those models and if certification or approval of any model(s) will be needed?</p> <p>c. If needed, does the RP propose the appropriate level of certification/approval for the model(s) and how it will be accomplished?</p>	EC 1105-2-410, Appendix B, Para 4i	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p><b>Comments:</b></p>
<b>12. Does the RP address opportunities for public participation?</b>		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does it indicate how and when there will be opportunities for public comment on the decision document?</p> <p>b. Does it indicate when significant and relevant public comments will be provided to reviewers before they conduct their review?</p> <p>c. Does it address whether the public, including scientific or professional societies, will be asked to nominate potential external peer reviewers?</p> <p>d. Does the RP list points of contact at the home district and the lead PCX for inquiries about the RP?</p>	<p>EC 1105-2-410, Appendix B, Para 4d</p> <p>EC 1105-2-410, Appendix B, Para 4e</p> <p>EC 1105-2-410, Appendix B, Para 4h</p> <p>EC 1105-2-410, Appendix B, Para 4a</p>	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p><b>Comments:</b></p>
<b>13. Does the RP address coordination with the appropriate Planning Centers of Expertise?</b>	EC 1105-2-410, Para 8a	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does it state if the project is single or multi-purpose? Single <input checked="" type="checkbox"/> Multi <input type="checkbox"/></p> <p>List purposes: Navigation</p> <p>b. Does it identify the lead PCX for peer review? Lead PCX: DD</p> <p>c. If multi-purpose, has the lead PCX</p>	EC 1105-2-410,	<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> n/a <input type="checkbox"/></p> <p><b>Comments:</b></p>

coordinated the review of the RP with the other PCXs as appropriate?	Appendix D, Para 3c	
<b>14. Does the RP address coordination with the Cost Engineering Directory of Expertise (DX) in Walla Walla District for ATR of cost estimates, construction schedules and contingencies for all documents requiring Congressional authorization?</b>	EC 1105-2-410, Appendix D, Para 3	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<p>a. Does it state if the decision document will require Congressional authorization?</p> <p>b. If Congressional authorization is required, does the state that coordination will occur with the Cost Engineering DX?</p>		<p>a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>b. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> n/a <input type="checkbox"/></p> <p><b>Comments:</b> It is not expected that the changes to the authorized project would require Congressional Authorization. However, this would be confirmed at the TSP SMART planning milestone.</p>
<p><b>15. Other Considerations:</b> This checklist highlights the minimum requirements for an RP based on EC 1105-2-410. Additional factors to consider in preparation of the RP include, but may not be limited to:</p> <p>a. Is a request from a State Governor or the head of a Federal or state agency to conduct IEPR likely?</p> <p>b. Is the home district expecting to submit a waiver to exclude the project study from IEPR?</p> <p>c. Are there additional Peer Review requirements specific to the home MSC or district (as described in the Quality Management Plan for the MSC or district)?</p> <p>d. Are there additional Peer Review needs unique to the project study?</p>	<p>EC 1105-2-410, Appendix D, Para 1b</p> <p>EC 1105-2-410, Appendix D, Para 1d</p>	<p><b>Comments:</b> Type I IEPR will be performed during study phase; Type II IEPR will be performed during implementation phase. IEPR was determined necessary due to potential impacts to the Freeport HFPP. The DDNPCX will serve as RMO during the study phase of the project; the RMC will serve as RMO during the implementation phase.</p>
<b>Detailed Comments and Backcheck:</b> KPO 8Sept16		