



REPLY TO  
ATTENTION OF

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

CESAD-RBT

12 January 2018

MEMORANDUM FOR COMMANDER, JACKSONVILLE DISTRICT

SUBJECT: Approval of the Implementation Documents Review Plan for the Tampa Harbor – Big Bend Channel, Hillsborough County, Florida

1. References:

a. Memorandum, CESAJ-EN-Q, 11 December 2017, subject: Approval of Review Plan for Preconstruction, Engineering and Design Phase Implementation Documents for Tampa Harbor – Big Bend Channel, Hillsborough County, Florida (Encl).

b. EC 1165-2-214, Civil Works Review, 15 December 2012.

2. The enclosed subject Review Plan (RP) submitted by the Jacksonville District via reference 1.a has been reviewed by the South Atlantic Division (SAD) and is hereby approved in accordance with reference 1.b above.

3. SAD concurs with the District Chief of Engineering's determination that a Type II Independent External Peer Review (IEPR) is not required on the Plans and Specifications and Design Documentation Report on this dredging effort. The primary basis for this concurrence is that failure or loss of the features associated with this dredging effort will not pose a significant threat to human life.

4. The District should take steps to post the approved RP to its web site and provide a link to CESAD-RBT. Before posting to the web site, the names of Corps/Army employees should be removed. Subsequent significant changes to this RP, such as scope or level of review changes, should they become necessary, will require new written approval from this office.

5. The SAD point of contact is [REDACTED].

Encl

[REDACTED]

Brigadier General, USA  
Commanding

CF:

[REDACTED]



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
JACKSONVILLE DISTRICT CORPS OF ENGINEERS  
701 SAN MARCO BOULEVARD  
JACKSONVILLE, FLORIDA 32207

11 DEC 2017

CESAJ-EN-Q

MEMORANDUM FOR Commander, South Atlantic Division (CESAD-RBT), 60 Forsyth Street SW 10M15, Atlanta, GA 30303

SUBJECT: Approval of Review Plan for Preconstruction, Engineering and Design Phase Implementation Documents for Tampa Harbor - Big Bend Channel, Hillsborough County, Florida

1. References.

- a. EC 1165-2-214, Civil Works Review, 15 Dec 12
- b. WRDA 1999; PL 106-53 dated 17 Aug 99 (Project Authorization)

2. I hereby request approval of the enclosed Review Plan and concurrence with the conclusion that a Type II Independent External Peer Review (IEPR) of the subject project is not required. The recommendation to exclude Type II IEPR is based on the EC 1165-2-214 Risk Informed Decision Process as presented in the Review Plan. Documents to be reviewed include plans, specifications, and design documentation. The Review Plan complies with applicable policy, provides Agency Technical Review and has been coordinated with the CESAD. It is my understanding that non-substantive changes to this Review Plan, should they become necessary, are authorized by CESAD.

3. The district will post the CESAD approved Review Plan to its website and provide a link to the CESAD for its use. Names of Corps/Army employees will be withheld from the posted version, in accordance with guidance.

4. If you have any questions regarding the information in this letter, please feel free to contact me or contact [REDACTED]

Encl

[REDACTED]  
Colonel, EN  
Commanding

# **PROJECT REVIEW PLAN**

For

## **Preconstruction, Engineering and Design Phase Implementation Documents**

For

### **Tampa Harbor - Big Bend Channel**

**Hillsborough County, Florida  
Project P2 number: 114043**

**Jacksonville District  
December 2017**



**US Army Corps  
of Engineers®**

THE INFORMATION CONTAINED IN THIS REVIEW PLAN IS DISTRIBUTED SOLELY FOR THE PURPOSE OF PREDISSEMINATION PEER REVIEW UNDER APPLICABLE INFORMATION QUALITY GUIDELINES. IT HAS NOT BEEN FORMALLY DISSEMINATED BY THE U.S. ARMY CORPS OF ENGINEERS, JACKSONVILLE DISTRICT. IT DOES NOT REPRESENT AND SHOULD NOT BE CONSTRUED TO REPRESENT ANY AGENCY DETERMINATION OR POLICY.

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ATTACHMENT A - Approved Review Plan Revisions

ATTACHMENT B - Partial List of Acronyms and Abbreviations

ATTACHMENT C - ATR Report Outline and Completion of Agency Technical Review Form

## **1. PURPOSE AND REQUIREMENTS**

### **a. Purpose**

This Review Plan defines the scope of review activities for the Tampa Harbor - Big Bend Channel Deepening and Widening Project, Hillsborough County, Florida. As discussed below, the review activities consist of a District Quality Control (DQC) effort, an Agency Technical Review (ATR), and a Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review. Also as discussed below, an Independent External Peer Review (IEPR) is not recommended. The project is in the design phase, and the related documents including Plans and Specifications (P&S) and a Design Documentation Report (DDR) are the implementation documents. Upon approval, this review plan will be included into the Project Management Plan for this project as an appendix to the Quality Management Plan.

### **b. References**

- (1). ER 1110-2-1150, "Engineering and Design for Civil Works Projects", 31 August 1999
- (2). ER 1110-1-12, "Engineering and Design Quality Management", 31 March 2011
- (3). EC 1165-2-214, "Civil Works Review", 15 December 2012
- (4). ER 415-1-11, "Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Review", 1 January 2013
- (5). SAJ EN QMS 02611, "SAJ Quality Control of In-House Products: Civil Works PED", 21 November 2011
- (6). SAJ EN QMS 08550, "BCOES Reviews", 21 September 2011
- (7). Enterprise Standard (ES) 08025, "Government Construction Quality Assurance Plan and Project/Contract Supplements"
- (8). Enterprise Standard (ES) 08026, "Three Phase Quality Control System"
- (9). P2 # 114043, Project Management Plan, Tampa Harbor, Florida, Big Bend Channel, December 2013
- (10). Final Feasibility Report and Environmental Assessment, Navigation Study for Tampa Harbor – Big Bend Channel – 10128, 30 September 1996
- (11). Chief of Engineers Report, Tampa Harbor, Big Bend Channel, Florida, 13 October 1998

### **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 provides the procedures for ensuring the quality and credibility of U.S. Army Corps of Engineers (USACE) decision, implementation, and operations and maintenance documents and other work products. The EC outlines five levels of review: District Quality Control (DQC), Agency Technical Review, Independent External Peer Review, Policy and Legal Review, and a Biddability, Constructability, Operability, Environmental, and Sustainability Review.

**d. Review Plan Approval and Updates**

The South 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. Like the PMP, the Review Plan is a living document and may change as the project progresses. The Jacksonville 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 A. 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, will be posted on the Jacksonville District’s webpage. The latest Review Plan will be provided to the RMO and home MSC.

**e. Review Management Organization**

The South Atlantic Division (SAD) is designated as the Review Management Organization (RMO). The RMO, in cooperation of the vertical team, will approve the ATR team members selected by the Jacksonville District US Army Corps of Engineers (CESAJ). CESAJ will assist SAD with management of the ATR and will develop the charge to reviewers.

**2. PROJECT INFORMATION**

**a. Project Location**

The Tampa Harbor - Big Bend Channel is located in the upper east portion of Tampa Bay, and is part of the Tampa Harbor navigation system. The Tampa Harbor Big Bend Navigation Project is designed to safely accommodate existing and prospective vessels that navigate Tampa Harbor. The Big Bend Channel provides access to a three-berth terminal handling dry bulk products, also known as Port Redwing, that is operated by the TPA with planned future development of the area for additional dry bulk and cargo terminals. It also provides access to Mosaic Company’s two-berth export terminal which handles multiple phosphate-based products, and it provides access to TECO’s terminal designed for the receipt of coal for power generation at TECO’s Big Bend Station located on the eastern periphery of Tampa Bay.

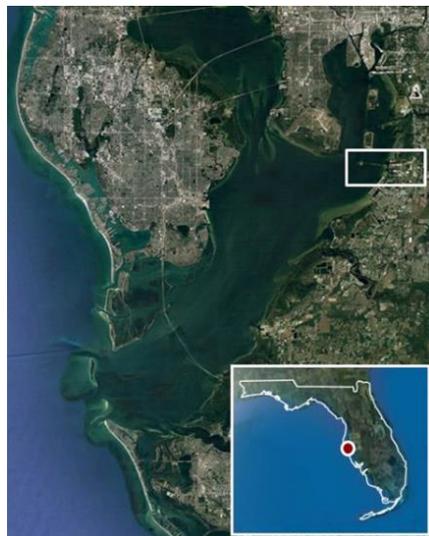


Figure 1: Project Map

**b. Project Authorization**

Authorization for Tampa Harbor Big Bend was provided in the Water Resources Development Act of 1999 (Public Law 106-53), Section 101 (a) (18) which contained the following language: “(18) TAMPA HARBOR-BIG BEND CHANNEL, FLORIDA.—The project for navigation, Tampa Harbor-Big Bend Channel, Florida: Report of the Chief of Engineers dated October 13, 1998, at a total cost of \$12,356,000, with an estimated Federal cost of \$6,235,000 and an estimated non-Federal cost of \$6,121,000.”

**c. Project Description**

The Big Bend Channel is maintained by local interests to a depth of 34 feet, and connects the Tampa Harbor main ship channel to terminals at Big Bend, a distance of 2.2 miles. The channel supports bulk movements of 8,000,000 tons annually of coal, phosphate rock, and phosphate chemicals at the Big Bend terminals. Channel improvements will allow existing fleet and new deeper draft vessels to utilize the channel more efficiently and safely, thereby reducing transportation cost.

A reconnaissance report was completed in 1980 that recommended further study for both Big Bend Channel and Alafia River. The following feasibility report recommended channel widths of 300 feet and depths of 43 feet for both Alafia River and Big Bend Channel. The feasibility report was submitted to the Board of Engineers for Rivers and Harbors in 1985 but was returned at the sponsor's request. Another reconnaissance report was prepared in 1991 which recommended further study of only Big Bend Channel. Alafia River was found to be a single owner situation and no further study was recommended for that portion. The feasibility study was authorized by Senate and House Resolutions adopted 29 May 1979 and 14 November 1979, respectively. A Feasibility Cost Sharing Agreement (FCSA) was negotiated and executed in 1992 for a feasibility level study of Big Bend Channel. The feasibility study recommended modifications for the entrance channel, widener, turning basin, inner channel, east channel, and berthing areas.

Work for the Tampa Harbor - Big Bend Channel Deepening and Widening Project consists of construction dredging of shoal and new work material (approximately 4 Million cubic yards) from the Big Bend Channel of Tampa Harbor and will be divided into a Base and 2 Option Items. The Federal project consists of the Entrance Channel, Turning Basin, East Channel, Inner Channel, and associated wideners. The construction dredging project will deepen the existing channel segments from approximately 36 feet to 41 feet plus 2 feet of Advance Maintenance and associated overdepths. The Entrance Channel will be widened from 200 feet to 250 feet for a length of approximately 1.9 miles. Additionally, the existing Turning Basin will be expanded to provide a minimum diameter of 1200 feet and turn wideners added where necessary. Associated non-Federal facilities include deepening the berthing areas and further expanding the East Channel. All dredged material from the project will be disposed of in Dredge Material Placement Facility DMPF 3-D located approximately 2.5 nautical miles from the area to be dredged. It is anticipated that the material to be dredged from the East Channel and associated berthing areas includes rock of sufficient hardness and massiveness such that blasting or some other form of pretreatment would be needed to efficiently remove the rock in conjunction with dredging of this reach.

**d. Public Participation**

The Jacksonville District Corporate Communications Office continually keeps the affected public informed on Jacksonville District projects and activities. There are no planned activities,

public participation meetings or workshops that could generate issues needing provision to review teams. The approved review plan will be posted on the Jacksonville District Internet. Any comments or questions regarding the review plan will be addressed by the Jacksonville District.

**e. In-Kind-Contributions by Project Sponsor**

There are no in-kind sponsor contributions related to the P&S and DDR that will affect this review plan or related reviews.

**f. Civil Works Cost Engineering Mandatory Center of Expertise Review and Certification**

The cost related documents associated with the P&S and DDR and the associated contract do not require external peer review or certification by the Cost Engineering Mandatory Center of Expertise (MCX).

**3. DISTRICT QUALITY CONTROL**

District Quality Control and Quality Assurance activities for DDRs and P&S are stipulated in ER 1110-1-12, Engineering & Design Quality Management and SAJ EN QMS 02611. The subject project DDR and P&S will be prepared by the Jacksonville District using ER 1110-1-12 procedures and will undergo District Quality Control. SAJ EN QMS 02611 defines DQC as the sum of two reviews, Discipline Quality Control Review (DQCR) and Product Quality Control Review (PQCR). Product Quality Control Review Certification is the DQC Certification and will precede ATR.

**4. AGENCY TECHNICAL REVIEW**

**a. Risk Informed Decision on Appropriate Level of Review**

The project contains an area of new work dredging that also involves drilling and blasting. PED phase implementation documents are being prepared and an ATR of the P&S and DDR documents will be required.

**b. Agency Technical Review Scope.**

Agency Technical Review (ATR) is undertaken to "ensure the quality and credibility of the government's scientific information" in accordance with EC 1165-2-214 and ER 1110-1-12. An ATR will be performed on the P&S and DDR pre-final submittals.

ATR will be conducted by individuals and organizations that are external to the Jacksonville District. The ATR Team Leader will be a Corps of Engineers employee outside the South Atlantic Division. The required disciplines and experience are described below.

ATR comments are documented in the DrChecks<sup>sm</sup> model review documentation database. DrChecks<sup>sm</sup> is a module in the ProjNet<sup>sm</sup> suite of tools developed and operated at ERDC-CERL ([www.projnet.org](http://www.projnet.org)). At the conclusion of ATR, the ATR Team Leader will prepare an ATR Review Report that summarizes the review. An outline for an ATR Review Report is in Attachment C. The report will include at a minimum the Charge to Reviewers, ATR Certification Form from EC 1165-2-214, and the DrChecks<sup>sm</sup> printout of the comments.

**c. ATR Disciplines.**

As stipulated ER 1110-1-12, ATR members will be sought from the following sources: regional technical specialists (RTS); subject matter experts (SME) certified in CERCAP; senior level experts from other districts; Center of Expertise staff; experts from other USACE commands; contractors; academic or other technical experts; or a combination of the above. The ATR Team will be comprised of the following disciplines; knowledge, skills and abilities; and experience levels.

Geotechnical Engineering and Engineering Geology. The team member should be a registered professional and should have a minimum of 10 years of experience. Experience shall encompass geologic and geotechnical analyses that are used to support the development of Plans and Specifications for navigation projects to include blasting and blast plans.

Civil Engineering. The team member should be a registered professional engineer with 5 years of experience in civil/site work projects. Experience should include dredging and disposal operations, embankments, channels, revetments and navigation project features.

NEPA Compliance. The team member should have experience in NEPA compliance activities and preparation of Environmental Assessments and Environmental Impact Statements for navigation or shore protection projects. Experience with navigation projects that involve blasting and blast plans is required.

ATR Team Leader. The ATR Team Leader should have experience with Navigation Projects and have performed ATR Team Leader duties. ATR Team Leader can also serve as a co-duty to one of the review disciplines.

**5. BIDDABILITY, CONSTRUCTABILITY, OPERABILITY, ENVIRONMENTAL, AND SUSTAINABILITY REVIEW**

The value of a BCOES review is based on minimizing problems during the construction phase through effective checks performed by knowledgeable, experienced personnel prior to advertising for a contract. Biddability, constructability, operability, environmental, and sustainability requirements must be emphasized throughout the planning and design processes for all programs and projects, including during planning and design. This will help to ensure that the government's contract requirements are clear, executable, and readily understandable by private sector bidders or proposers. It will also help ensure that the construction may be done efficiently and in an environmentally sound manner, and that the construction activities and projects are sufficiently sustainable. Effective BCOES reviews of design and contract documents will reduce risks of cost and time growth, unnecessary changes and claims, as well as support safe, efficient, sustainable operations and maintenance by the facility users and maintenance organization after construction is complete. A BCOES Review will be conducted for this project. Requirements and further details are stipulated in ER 1110-1-12, ER 415-1-11, and 08550-SAJ, BCOES Reviews.

**6. INDEPENDENT EXTERNAL PEER REVIEW**

**a. General.**

EC 1165-2-214 provides implementation guidance for both Sections 2034 and 2035 of the Water Resources Development Act (WRDA) of 2007 (Public Law (P.L.) 110-114). The EC addresses review procedures for both the Planning and the Design and Construction Phases

(also referred to in USACE guidance as the Feasibility and the Pre-construction, Engineering and Design Phases). The EC defines Section 2035 Safety Assurance Review (SAR), Type II Independent External Peer Review (IEPR). The EC also requires Type II IEPR be managed and conducted outside the Corps of Engineers.

**b. Type I Independent External Peer Review Determination.**

A Type I IEPR is primarily associated with decision documents. A Type I IEPR is not applicable to the implementation documents covered by this Review Plan.

**c. Type II Independent External Peer Review Determination (Section 2035).**

This project does not trigger WRDA 2007 Section 2035 factors for Safety Assurance Review (termed Type II IEPR in EC 1165-2-214) and therefore, a review under Section 2035 is not required. The factors in determining whether a review of design and construction activities of a project are necessary as stated under Section 2035 along with the applicability statements for this Review Plan are as follows:

- (1) The failure of the project would pose a significant threat to human life.

*This project consists of channel dredging and failure of the navigation channel will not pose a significant threat to human life.*

- (2) The project involves the use of innovative materials or techniques.

*This project will utilize methods and procedures commonly used by the Corps of Engineers on other similar works.*

- (3) The project design lacks redundancy.

*The concept of redundancy does not apply to channel dredging projects.*

- (4) The project has unique construction sequencing or a reduced or overlapping design construction schedule.

*This project's construction sequence and schedule have been used successfully by the Corps of Engineers on this and other similar works. Construction schedules do not have unique sequencing and activities are not reduced or overlapped.*

Based on the discussion above, the District Chief of Engineering, as the Engineer-In-Responsible-Charge, does not recommend a Type II IEPR Safety Assurance Review of the P&S and DDR.

**7. POLICY AND LEGAL COMPLIANCE**

The Jacksonville District Office of Counsel reviews all contract actions for legal sufficiency in accordance with Engineer Federal Acquisition Regulation Supplement 1.602-2 Responsibilities. The subject implementation documents and supporting environmental documents will be reviewed for legal sufficiency prior to advertisement. Once approved, SAJ will post the approved review plan on the SAJ web site for viewing by the public.

**8. MODEL CERTIFICATION AND APPROVAL**

The project does not use any engineering models that have not been approved for use by USACE.

**9. PROJECT DELIVERY TEAM DISCIPLINES**

Discipline/Expertise
Geomatics & Survey
Civil Site Design / Construction
Geotechnical Engineering
Environmental Engineering
Geology

**10. BUDGET AND SCHEDULE**

**a. Project Milestones.**

Task	Date
DQCR	November 2017
PQCR/DQC*	December 2017
ATR Review	December 2017
ATR Certification	January 2018
BCOES Review	January 2018
BCOES Certification	February 2018

\*SAJ EN QMS 02611 defines DQC as the sum of DQCR and PQCR

**b. ATR Cost.**

Funds will be budgeted to execute ATR and schedule as outlined above. It is envisioned that each reviewer will be afforded 20 hours review plus 8 hours for coordination. ATR Leader will be funded for 40 hours. The estimated cost range is \$30,000 - \$35,000.

**ATTACHMENT A: APPROVED REVIEW PLAN REVISIONS**

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

**ATTACHMENT B: PARTIAL LIST OF ACRONYMS AND ABBREVIATIONS**

<u>Acronyms</u>	<u>Defined</u>
AFB	Alternatives Formulation Briefing
ATR	Agency Technical Review
BCOES	Biddability, Constructability, Operability, Environmental, and Sustainability Review
CAP	Continuing Authorities Program
CERCAP	Corps of Engineers Reviewer Certification and Access Program
CY	Cubic Yards
DDR	Design Documentation Report
DQC	District Quality Control
DQCR	Discipline Quality Control Review
EC	Engineering Circular
ER	Engineering Regulation
EA	Environmental Assessment
ERDC-CERL	Engineer Research and Development Center – Construction Engineering Research Laboratory
ESA	Endangered Species Act
ETL	Engineering Technical Lead
FDEP	Florida Department of Environmental Protection
FONSI	Findings of No Significant Impacts
FSCA	Feasibility and Cost Sharing Agreement
FY	Fiscal Year
GRR	General Reevaluation Report
IEPR	Independent External Peer Review
LPP	Locally Preferred Plan
MCX	Mandatory Center of Expertise
MLLW	Mean Low Low Water
MSC	Major Subordinate Command
NAS	National Academy of Sciences
NEPA	National Environmental Policy Act
ODMDS	Ocean Dredged Material Disposal Site
OMB	Office of Management and Budget
OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
P&S	Plans and Specifications
PED	Preconstruction Engineering and Design
PDT	Project Delivery Team
PM	Project Manager
PMP	Project Management Plan

<u>Acronyms</u>	<u>Defined</u>
PPA	Project Partnering Agreement
PQCR	Product Quality Control Review
QA	Quality Assurance
QCP	Quality Control Plan
QMP	Quality Management Plan
QMS	Quality Management System
RMC	Risk Management Center
RMO	Review Management Organization
RP	Review Plan
RTS	Regional Technical Specialist
SAJ	South Atlantic Jacksonville District Office
SAD	South Atlantic Division Office
SAR	Safety Assurance Review (also referred as Type II IEPR)
SME	Subject Matter Expert
USACE	U.S. Army Corps of Engineers
WRDA	Water Resources and Development Act

## **Attachment C**

### **Tampa Harbor - Big Bend Channel**

#### **Hillsborough County, Florida**

#### **Review of Plans and Specifications (P&S), Design Documentation Report (DDR)**

##### **ATR REPORT OUTLINE:**

- 1. Introduction:**
- 2. Project Description:**
- 3. ATR Team Members:**
  - Geotechnical Engineering and Engineering Geology.**
  - Civil Engineering.**
  - NEPA Compliance.**
  - ATR Team Leader.**
- 4. ATR Objective:**
- 5. Documents Reviewed:**
- 6. Findings and Conclusions:**
- 7. Unresolved Issues:**

# COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for Tampa Harbor, Big Bend Channel, Hillsborough County, Florida, including the design documents, plans and specifications, and DDR. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-214 and ER 1110-1-12. 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.

\_\_\_\_\_  
NAME  
ATR Team Leader

\_\_\_\_\_  
Date

\_\_\_\_\_  
NAME  
Project Manager

\_\_\_\_\_  
Date

\_\_\_\_\_  
NAME  
Review Management Office Representative

\_\_\_\_\_  
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.

\_\_\_\_\_  
NAME  
Chief, Engineering Division  
SAJ-EN

\_\_\_\_\_  
Date