

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

JUN 1 5 2011

#### CESPD-PDC

MEMORANDUM FOR Commander, Los Angeles District, ATTN: CESPL-PM-C, Ms. Gwen Meyer

SUBJECT: Review Plan Approval for the Nogales Wash and Tributaries, Chula Vista Channel, Arizona

1. The enclosed Review Plan for the Nogales Wash and Tributaries, Chula Vista Channel, Arizona, was prepared in accordance with EC 1165-2-209, dated 31 January 2010. The review plan and the termination of this construction project will require Independent External Peer Review Type II Safety Assurance Review (SAR).

2. The Review Plan will be made available for public comment, and the comments received will be incorporated into the Review Plan.

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

4. The point of contact for this memorandum is Mr. Paul Bowers, 415-503-6556, paul.w.bowers@usace.army.mil.

Building Strong on the Cornerstone of the Southwest!

Encl

Andrew Constantaras, P.E. Director, Regional Business Directorate

## REVIEW PLAN NOGALES WASH AND TRIBUTARIES, ARIZONA CHULA VISTA CHANNEL

# LOS ANGELES DISTRICT

Prepared by:

U.S. Army Corps of Engineers Los Angeles District

April 2011



US Army Corps of Engineers Los Angeles District

# REVIEW PLAN NOGALES WASH AND TRIBUTARIS, ARIZONA-CHULA VISTA CHANNEL LOS ANGELES DISTRICT

1.	INTRODUCTION	3
a.	Purpose	3
b.	References	3
c.	Review Requirements	3
2.	PROJECT DESCRIPTION.	4
a.	Project Authority	4
b.	Location	4
c.	Project Background	4
d.	Revised Project Description	6
3.	WORK PRODUCTS TO BE REVIEWED	7
a.	Products for Review	7
b.	Reference Material	7
4.	SCOPE OF REVIEW	7
a.	District Quality Control Activities	7
b.	Agency Technical Review	8
c.	Independent External Peer Review	8
	(1) Type I IEPR	8
	(2) Type II IEPR	10
d.	Role of the Sponsor During Review Process	10
5.	MODEL CERTIFICATION AND APPROVAL	10
6.	REVIEW TEAM.	11
a.	DQC Review Team.	11
b.	ATR Review Team	11
A	TR level of review is not required for the following disciplines:	12

c.	Type II IEPR (SAR) Review Team	12
7.	SCHEDULE FOR DDR AND P&S INCLUDING DQC, ATR & SAR	12
8.	DOCUMENTATION OF REVIEW	13
a.	DQC Documentation.	13
b.	ATR Communication and Documentation	13
c.	ATR Resolution. Reviewers shall back check PDT responses to the review comments and either	
clos	se the comment or attempt to resolve any disagreements. Conference calls shall be used to resolve	
any	conflicting comments and responses	13
d.	ATR Certification	14
9.	PUBLIC COMMENT	14
10.	POINTS OF CONTACT	14
11.	REVIEW PLAN APPROVAL	14

### **REVIEW PLAN**

### NOGALES WASH AND TRIBUTARIES, ARIZONA CHULA VISTA CHANNEL Santa Cruz County, Arizona

### April, 2011

## 1. INTRODUCTION

Purpose. This Review Plan (RP) defines the scope and level of quality management activities for a. the Chula Vista Channel located in Santa Cruz County, near the town of Nogales, Arizona. This RP accompanies the revised Project Management Plan (PMP) prepared for the authorized and partially constructed Nogales Wash & Tributaries, Nogales, Arizona Flood Risk Management Project (Nogales Wash Project). The PMP will accomplish the following: 1) update project features, 2) re-evaluate the future without project conditions costs and benefits; 3) document environmental conditions, 4) document required mitigation; and 5) update the federal and nonfederal requirements and goals for transitioning the project to termination. The PMP has been coordinated with the non-Federal sponsor. The Environmental Assessment (EA) was approved in 1988 and a Supplemental Environmental Assessment (SEA) that updates the environmental conditions and commitments was completed in 2004. In addition, the Biological Opinion was completed in May 2005 and one phase of the onsite mitigation was completed in 2007. Therefore, the District has determined continued biological monitoring of aquatic habitat and implementation of onsite and off-site mitigation should satisfy the procedural and substantive requirements of National Environmental Policy Act (NEPA), Endangered Species Act (ESA) and National Historic Preservation Act (NHPA) compliance for the project.

#### b. <u>References</u>

- (1) ER 1110-2-1150, Engineering and Design for Civil Works Projects, 31 Aug 1999
- (2) ER 1110-1-12, Engineering and Design Quality Management, 21 Jul 2006
- (3) WRDA 2007 H. R. 1495 Public Law 110-114, 8 Nov 2007
- (4) EC 1165-2-209, Civil Works Review Policy, 31 Jan 2010
- (5) Army Regulation 15–1, Committee Management, 27 November 1992 (Federal Advisory Committee Act Requirements)
- (6) National Academy of Sciences, Background Information and Confidential Conflict of Interest Disclosure, BI/COI FORM, 3 May 2003
- (7) Project Management Plan, revised April 2011
- (8) VE Study Report, October 27-30 2009, Final Approved 13 July 2010 prepared by CDM
- c. <u>Review Requirements</u>. This Review Plan was developed in accordance with EC 1165-2-209, which establishes the procedures for ensuring the quality and credibility of U.S. Army Corps of Engineers (USACE) decision and implementation documents through independent review. This RP describes the scope of review for the current phase of work. All appropriate levels of review (DQC, ATR, IEPR and Policy and Legal Review) will be included in this RP and any levels not included will require documentation in the RP of the risk-informed decision not to undertake that

level of review. The RP identifies the most important skill sets needed in the reviews and the objective of the review and the specific advice sought, thus setting the appropriate scale and scope of review for the individual project.

# 2. PROJECT DESCRIPTION.

- a. <u>Project Authority</u>. The Nogales Wash Tributaries, Arizona Project was originally authorized by the Water Resources Development Act of 1990, Public Law 101-966, Section 101. The reduction in scope for the current project was requested by the Non-Federal sponsor, Santa Cruz County per the Project Cooperation Agreement signed in 2005. The remaining project must be completed within the current 902 congressionally authorized project cost limit of \$36,062,000. In addition to the requirement to remain under the authorized project 902 cost limit, additional project constraints are that no further real estate will be acquired, and the International Outfall Interceptor sewer line will be avoided.
- b. <u>Location</u>. The project site is located in southern Santa Cruz County, Arizona, approximately five miles north of the US-Mexico border along Nogales Wash just east of the Chula Vista subdivision.
- c. <u>Project Background</u>. The original plans for improvements along Nogales Wash can be found in the April 1994 Design Memorandum "Chula Vista Channel." The original improvements consisted of four key elements (see Figure 1):
  - Potrero Creek Interceptor Channel to the south of Chula Vista
  - Nogales Wash Channel east of Chula Vista
  - An energy dissipater and an outlet channel in Nogales Wash on the northeast end
  - Relocation of a water line and a 30" international sewer line



Figure 1: Nogales Wash - Chula Vista Channel Authorized Project

The goal of the authorized project was to provide flood protection for the Chula Vista community which is located in the flood plain of Nogales Wash and Potrero Creek. During large storm events Potrero Creek overtops and the excess flow is conveyed overland through the Chula Vista community before it is collected by Nogales Wash. This has been a historic problem and has caused property damage in the Chula Vista Community, but has not led to any loss of life. The original plan protected the Chula Vista community by intercepting the 100 year flows just south of the sub-division and re-directing the flows around the community and back into Nogales Wash just north of Chula Vista. All channel improvements were designed to handle a 100-year flow event of 25,000 cfs.

Construction of the channel improvements began in 2005 with clearing and grubbing, and progressed through January of 2009. In this time, the contractor completed the energy dissipater and outlet channel northeast of Chula Vista, constructed a portion of the concrete channel, removed the bridge along Old Tucson Road that crossed Nogales Wash, and completed construction of the relocation of the 30" international sewer line. Upon completion of the sewer line relocation the agency in charge of the sewer line recommended the new line be abandoned due to a deficient design that was not approved by the agency. Construction on the channel had to be halted since the existing sewer line is located through the middle of the proposed channel improvements.

A button up channel was constructed in June of 2009 to provide temporary bank stabilization along Nogales Wash just upstream of the newly constructed improvements. Additional bank protection was installed in September of 2009 after an increase in erosion within the channel. This additional protection was not built per plan and was washed away by high stream flows during the summer of 2010. Repairs to the temporary drop structure were also completed during the summer of 2010.

A Value Engineering (VE) study was conducted in October of 2009 at a cost of \$117,400 to determine a design that avoided the existing sewer line and could still convey 25,000 cfs into the newly constructed channel improvements. The VE study accomplished this goal by raising the invert of the proposed channel and using a wider concrete trapezoidal section as opposed to a rectangular section. This design cut off access along Old Tucson Road over Nogales Wash and provided a new connector road from I-19 to old Tucson Road just north of the Chula Vista Community. The VE study design met the design goals of the original design while reducing the total cost of the project by 6.7 million. This design was ultimately rejected by the county Board of Supervisors for two reasons: it interfered with an established truck route along Old Tucson Road and the county could not obtain the right of way necessary for the connector road between I-10 and Old Tucson Road.

d. <u>Revised Project Description</u>. The proposed project will replace the bridge along Old Tucson Road over Nogales Wash and replace the current button up channel improvements with permanent bank protection. Due to prior construction, there is a limited budget available for additional channel improvements and the target cfs of the proposed project has been reduced to 10,000 cfs. This target flow was found to be the maximum amount of water that currently enters Nogales Wash. Currently appropriated funding will be used to complete design and construction of the bridge (formed by a 50 foot wide, 4 bay box culvert design), road, and drop structure. The work will include construction of the segment of channel necessary to protect the bridge and begin transition to the existing channel. As future funds are appropriated, within this 902 limit, they will be committed to completion of the remaining features including mitigation, an economic update, and extension of the transition channel, as appropriate. In addition to the requirement to remain under the authorized project 902 cost limit, additional project constraints are that no further real estate will be acquired, and the International Outfall Interceptor sewer line will be avoided. This project will not provide any flood protection for the Chula Vista Community. The Nogales Wash transition project is depicted in Figure 2.



Figure 2: Proposed Project Transition

# 3. WORK PRODUCTS TO BE REVIEWED

- a. <u>Products for Review</u>. A Design Documentation Report (DDR) will outline the design procedures and standards used to develop the proposed improvements. The ultimate goal of the DDR will be to determine the most cost effective bridge and channel design that will pass 10,000 cfs. A set of Plans and Specifications will be developed per the recommendations of the DDR. The work on the Plans and Specifications will also be split between a private AE firm and the PDT. The AE will provide design for the road alignment and bridge replacement. The Corps will do channel design in house. Geotechnical testing will also be done by the AE. The AE will write the DDR. An Operations & Maintenance (O & M) Manual will be developed and provided to the Sponsor with project completion.
- b. <u>Reference Material</u>. Electronic copies of the Nogales Wash and Tributaries Feasibility Report and Environmental Assessment from March 1988, the original April 1994 Design Memorandum for the Chula Vista Channel and the construction plans and specs based on the April 1994 Design Memorandum in Adobe Acrobat PDF format will be posted for the District Quality Control (DQC) Activities and the ATR Reviewers.

## 4. SCOPE OF REVIEW

a. <u>District Quality Control Activities</u>. District Quality Control (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). DQC activities will take place at

the 60 percent complete and 90 percent complete stages for both the DDR and the Plans and Specifications. There will also be a DQC review of the O & M Manual.

b. <u>Agency Technical Review</u>. Agency Technical Review (ATR) is undertaken to "ensure the quality and credibility of the government's scientific information" in accordance with EC 1165-2-209." ATR is an in-depth review, managed within USACE, and conducted by a qualified team outside of the home district that is not involved in the day-to-day production of the project/product. To assure independence, the leader of the ATR team shall be from outside the home MSC. In order to ensure incorporation of USACE national experience for Flood Risk Management Projects (as updated per post-Katrina investigations), and in addition to the DQC, an ATR will be performed.

The ATR will be necessary for the DDR, the Plans and Specifications, and the O & M Manual for completed project features and the bridge. The South Pacific Division Major Subordinate Command (MSC) will be the designated Review Management Office (RMO) for both the DDR and the Plans and Specifications. Each ATR will review the work prepared by the PDT and the private AE firm. All stages of the ATR, and each member of the ATR teams, shall follow the guidelines outlined in EC 1165-2-209. Members of each ATR team shall pay special attention to all items related to their areas of their expertise and ensure the products being reviewed conform to all published guidance, including Engineering Regulations, Engineering Circulars, Engineering Manuals, Engineering Technical Letters, Engineering Construction Bulletins, Policy Guidance Letters, implementation guidance, project guidance memoranda, and other formal guidance memoranda issued by HQUSACE. ATR members may comment on items outside their field of expertise as necessary.

- c. <u>Independent External Peer Review</u>. Independent External Peer Review (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. The Water Resources Development Act of 2007 included two separate requirements for review by external experts. Type I IEPR, established by Section 2034, requires independent peer review of project studies under certain conditions. Type II IEPR, established by Section 2035, requires a Safety Assurance Review (SAR) of "the design and construction activities for hurricane and storm damage reduction and flood damage reduction projects."
  - (1) Type I IEPR According to EC 11650-2-209 a Type I IEPR is required if a project meets any one of the following criteria:
    - The project poses a significant threat to human life.
    - The estimated total cost of the project is greater than \$45 million.
    - The Governor of the affected State requests a review by independent experts.
    - The Director of Civil Works (DCW) or Chief of Engineers determines that the project is 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 proposed project will not require a type I IEPR due to the fact it meets none of the criteria listed above. In addition, the project meets the following additional criteria, as stated in EC 11650-2-209:

- The project does not include an Environmental Impact Statement.
- The product is not likely to contain influential scientific information or be a highly influential scientific assessment.
- The project has no impact on any scarce or unique tribal, cultural, or historic resources.
- The project has no adverse impacts on fish or wildlife species and their habitat prior to the implementation of mitigation measures.
- The project has no impacts on species listed as endangered or threatened under the Endangered Species Act of 1973 or the critical habitat of such species designated under such Act.

Not only does this project meet all criteria to preclude a Type I-IEPR, but also, the project is not large enough. Ultimately, the reduced project replaces a bridge that was removed during construction and provides permanent bank projection in areas where there is already temporary protection. Completion of this project will not solve the flooding problems in the area. However, flooding in this area is a historic problem that has only caused property damage to date and has not been severe enough to cause loss of life. The flooding conditions will be slightly improved due to the fact the proposed channel has a larger capacity than the channel that existed prior to any construction. The proposed bridge replaces a bridge removed during construction and will meet all current design standards. Overall, this project will improve the channel stability conditions of the area when compared to pre-construction conditions and remain within the authorized project cost.

Any non performance of the project will fall into one of the following categories:

(a) The bridge washes out/collapses:

This could lead to the injury or even death of any person on the bridge when it fails. Also, the bridge debris could damage the downstream channel improvements. There will be no access across Nogales Wash. Alternative access routes will be required until the bridge is replaced.

(b) The channel fails:

This would lead to bank erosion at the area of failure and even has the potential to cause damage to either the neighboring railroad track or Old Tucson Road. If this happened, then either the railroad or Old Tucson Road may have to be closed down until repairs are completed.

(c) The bridge fails to pass 10,000 cfs:

The bridge would overtop and access across the bridge could be impeded. If the backwater in the channel is severe enough the water could over top the channel and spill onto neighboring Old Tucson Road and even into the Chula Vista development.

- (d) The channel fails near the sewer line: If the failure is severe enough this could damage the 30" sewer line crossing Nogales Wash and contaminate the stream along with the surrounding ground water. If any damage occurs to the line then the line would have to be shutdown until it is repaired.
- (e) Debris plugs the box culverts: The bridge would overtop and access across the bridge could be impeded. If the backwater in the channel is severe enough the water

could over top the channel and spill onto neighboring Old Tucson Road and even into the Chula Vista development.

All these problems can be prevented if the project is properly designed and constructed. All elements of this project will be designed to meet well established standards and any deviations from the standards will be corrected during the DQC and ATR stages of the review.

- (2) Type II IEPR A Type II IEPR (SAR). The proposed project will require a SAR because the channel improvements are part of a flood risk management project. The SAR will be conducted in congruence with the ATR for both the DDR and the Plans and Specifications. All procedures shall follow EC 1165-2-209. The SAR will consist of both document review and site visits prior to and during construction. For the purpose of the Type II IEPR, the Review Management Center (RMC) and SPD have agreed that SPD will be the USACE Risk Management Office (RMO).
- d. <u>Role of the Sponsor During Review Process</u>. The sponsor shall review both the DDR and Plans and Specifications after the 60% and 90% DQC review activities have been completed. The sponsor shall ensure the submitted material complies with all city, county and state requirements applicable to the project.

# 5. MODEL CERTIFICATION AND APPROVAL

- **a. General.** The appropriate PCX will be responsible for model certification/approval as needed. The use of a certified or approved model does not constitute technical review of the model. Independent review of the selection and application of the model and the input data and results is still required through conduct of DQC, ATR, and, if appropriate, IEPR. Independent review is applicable to all models, not just planning models. Engineering models used in the development of the decision document are described below:
- b. Planning Models. No future planning models are anticipated for the Nogales, Wash AZ project. An Economic Analysis was completed in August 2010 in accordance with standards, procedures, and guidance of the US Army Corps of Engineers (USACE). The Planning Guidance Notebook—ER 1105-2-100, April 2000—served as the primary source of evaluation methods of flood damage reduction studies and is used extensively for the purpose of this analysis. Additional guidance for risk-based analysis is obtained from EM 1110-2-1619, Engineering and Design—Risk Based Analysis for Flood Damage Reduction Studies, August 1996, and ER 1105-2-101, Planning Risk Based Analysis of Hydrology/Hydraulics, Geotechnical Stability and Economics in Flood Damage Reduction Studies, January 2006. The analysis was performed using a base year of 2013 and a future year of 2063, and is performed for a 50 year period of analysis. All values are in October 2009 price levels and a Federal discount rate of 4 3/8% was used.

### c. Engineering Models.

- MII: This is a cost-estimating model.
- HEC-RAS: HEC RAS River Analysis System Version 4.1.0, January 2010 (USACE) will be used for the hydraulic analysis. The function of this model is to complete one-dimensional hydraulic calculations for a full network of natural and manmade channels.

- Bentley Inroads V8i Version 08.11.07.246 used for developing Civil CADD Digital Terrain Model for development of drawings and computing earthwork quantities. It will also be used to design the roadway plan, profile and cross-sections. It is the CADD program being used for the project.
- Bentley CONSPAN Version V8i Version 08.001.06
- Ensoft, Inc. LPile Plus Version 5.0.46 for pile design if it is determined piles are needed to support culverts.
- GeoStudio 2007 v7.17 industry standard geotechnical engineering software.
- AQTESOLV v.4.5 industry standard aquifer analysis software.

## 6. REVIEW TEAM.

All procedures for selecting a review team for each part of the review process shall follow the measures outlined in EC 1165-2-209.

a. <u>DQC Review Team.</u> The DQC process will be conducted by both the USACE and the private AE firm. Members of the review team are based in the URS office in Phoenix, AZ. All work done by the private AE firm has been accounted for in the awarded contract and will not require additional funds.

DQC Review Team & Cost Estimate			
Civi Design Review	Frank Mallette	\$3000	
Hydraulics Design Review	Jody Fischer	\$3000	
Cost Engineering Review	Philip Eng	\$3000	
Economics Review	Michael Hallisy	\$3000	
Environmental Review	Michael Fink	\$3000	
Legal Review	Lawrence Minch		

The DQC team members from the USACE are:

All DQC team members are based in the Los Angeles District main office. A charge code for the DQC activities will be established by the Program Manager and distributed to each member of the DQC team. The Program Manager will be responsible for ensuring there are appropriate funds available for each stage of review. For all work produced by the private AE firm that is outside the realm of expertise of the Los Angeles District main office, for example any modifications to the horizontal alignment of the roadway, the USACE DQC team will refer to the QA/QC performed by the private AE firm. As ATR is done outside the District, the District will need to do a quality assurance review of the sponsor products in order to provide the AE the opportunity to make changes if we are not satisfied with their product prior to ATR. The cost of DQC is included in the labor cost estimates provided by the individual PDT members. The estimated cost for DQC is \$18,000.

- b. <u>ATR Review Team</u>. The ATR will be conducted by Northwest Division (NWD) as selected by SPD, the designated RMO. The RMO will be responsible for selecting all team members and ensuring the selection process follows all criteria outlined in EC 1165-2-209. The team will require a senior staff member for each of the following technical categories:
  - Civil Design

- Geotechnical Engineering
- Hydraulic Engineering
- Structural Engineering
- Roadway Design
- Cost Engineering
- Environmental
- Construction Management

ATR level of review is not required for the following disciplines:

- Hydrology ATR is not required due to the fact that the design is based on a predetermined flow rate rather than an optimization for NED.
- Economics ATR review is not required because the without project conditions and the with project conditions are the same.

The PDT leader will ensure there are enough funds budgeted for all ATR activities. Prior to all ATR activated, the PDT will coordinate with the RMO for the ATR process on the establishment of appropriate charge codes for all work done by the ATR team. The RMO for the ATR process will distribute the charge codes as necessary. The total ATR cost for this project is estimated to be \$20,000. This will result in an estimated budget of \$2500 per reviewer.

c. <u>Type II IEPR (SAR) Review Team</u>. The IEPR panel will be made up of independent, recognized experts from outside the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. Panel members will be selected by the RMO for the SAR process using the National Academies of Science (NAS) policy for selecting reviewers and all standards outlined in EC 1165-2-209. The total IEPR cost for this project is estimated to be \$30,000. With a review team composed of 7 members with disciplines similar to the ATR team, this will result in an estimated budget of \$4285 per reviewer

## 7. SCHEDULE FOR DDR AND P&S INCLUDING DQC, ATR & SAR

DDR Review Schedule	Submit By	<b>Duration of Review</b>
Private AE 60% DDR DQC	7/21/11	1 Week
60% DDR DQC	08/02/11	2 Weeks
Draft DDR to Sponsor	08/15/11	
Private AE 90% DDR DQC	08/15/11	1 Week
90% DDR DQC	08/22/11	2 Weeks
DDR ATR	11/23/11	2 Weeks
90%DDR to Sponsor	12/07/11	2 Weeks
Final Submittal	12/21/11	
DDR Approved	01/10/12	

Plans and Specification Review P&S) Schedule	Submit By	<b>Duration of Review</b>
Private AE 60% P&S DQC	7/23/11	1 Week
60% P&S DQC	8/1/11	2 Weeks
Draft P&S to Sponsor	8/21/11	2 Weeks
Private AE 90% P&S DQC	9/19/11	1 Week
90% P&S DQC	9/26/11	1 Week
P&S SAR	10/01/11	2 Weeks

P&S ATR	10/01/11	2 Weeks
P&S to Sponsor	10/15/11	2 Weeks
SPD Approved SAR Review	01/10/12	
Final P&S Approved	12/05/11	

## 8. DOCUMENTATION OF REVIEW

- a. <u>DQC Documentation</u>. All documentation for each DQC activity shall follow all procedures dictated by the Major Subordinate Command (MSC) and all applicable district quality control manuals. The private AE will submit all documentation from each DQC activity after their completion to the PDT team leader so the material can be combined with all documentation produced by the USACE for its own DQC activities. Examples of documents reviewed under DQC are the DDR, P & S, and the O&M Manual.
- b. <u>ATR Communication and Documentation</u>. The communication and documentation plan for the ATR is as follows:
  - (1) The team will use Document Review and Checking System (DrChecks) to document the ATR process. The Technical Project Leader will facilitate the creation of a project portfolio in the system to allow access by all PDT and ATR TEAM members. An electronic version of the documents, appendices, and any significant and relevant public comments shall be posted in Adobe Acrobat PDF format at: ftp://ftp.usace.army.mil/pub/ at least one business day prior to the start of the comment period.
  - (2) The PDT shall send the ATR team leader one hard copy of the documents for each ATR team member such that the copies are received at least one business day prior to the start of the comment period.
  - (3) The PDT shall host an ATR kick-off meeting virtually to orient the ATR team during the first week of the comment period. If funds are not available for an on-site meeting, the PDT shall provide a presentation about the project, including photos of the site, for the team.
  - (4) The Technical Project Leader shall inform the ATR team leader when all responses have been entered into DrChecks and conduct a briefing to summarize comment responses to highlight any areas of disagreement.
  - (5) A revised electronic version of the documents with comments incorporated shall be posted at ftp://ftp.usace.army.mil/pub/ for use during back checking of the comments.
  - (6) PDT members shall contact ATR team members or leader as appropriate to seek clarification of a comment's intent or provide clarification of information in the report.
  - (7) Discussions shall occur outside of DrChecks but a summary of discussions may be provided in the system.
  - (8) Reviewers will be encouraged to contact PDT members directly via email or phone to clarify any confusion. DrChecks shall not be used to post questions needed for clarification.
- c. <u>ATR Resolution</u>. Reviewers shall back check PDT responses to the review comments and either close the comment or attempt to resolve any disagreements. Conference calls shall be used to resolve any conflicting comments and responses.

Reviewers may "agree to disagree" with any comment response and close the comment with a detailed explanation. If reviewer and responder cannot resolve a comment, it should be brought to the attention of the ATR team leader and, if not resolved by the ATR team leader, brought to the attention of the Engineering chief who will need to sign the certification. ATR Team members shall keep the ATR team leader informed of problematic comments. The vertical team will be informed of any policy variations or other issues that may cause concern during HQ review.

d. <u>ATR Certification</u>. To fully document the ATR process, a statement of technical review will be prepared for each product reviewed. Certification by the ATR team leader and the Technical Project Leader will occur once issues raised by the reviewers have been addressed to the review team's satisfaction. Indication of this concurrence will be documented by the signing of a certification statement.

## 9. PUBLIC COMMENT

To ensure that the peer review approach is responsive to the wide array of stakeholders and customers, both within and outside the Federal Government, this Review Plan will be published on the district's public internet site following approval by SPD at <u>http://spl.usace.army.mil/review\_plans</u>. 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. The public is invited to review and submit comments on the plan as described on the web site.

## **10. POINTS OF CONTACT**

Questions about this Review Plan may be directed to the Los Angeles District Project Delivery Team, Lead Engineer, Mr. Frank Mallette at (213) 452-3667, or to the Project Engineer, Mr. Larry Walsh at (213) 452-3634. The Chief, Engineering Division is Mr. Richard J. Leifield, PE at (213) 452-3629.

## **11. REVIEW PLAN APPROVAL**

As described above, the Los Angeles District recommends that Agency Technical Review be completed on the Design Document Report and the Plans and Specifications for termination of the Nogales Wash and Tributaries Project. The Los Angeles District has determined that a Type I Independent External Peer Review is not necessary; however, a Type II Independent External Peer Review (Safety Assurance Review) is required and will be conducted.

The Los Angeles District requests that the South Pacific Division endorse the above recommendations and approve this Review Plan as described in Appendix B of EC 1165-2-209.