

National Planning Centers of Expertise

Agency Technical Review

DISTRICT QUALITY CONTROL (DQC) PRIMER



**US Army Corps
of Engineers®**

PCX Guild Tool Box

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INTRODUCTION

Civil Works Studies undergo several levels of review: District Quality Control (DQC), Agency Technical Review (ATR), Major Support Command (MSC) Policy Review, Office of Water Project Review (OWPR), and Independent External Peer Review (IEPR). In SMART Planning there may be less frequent formal ATRs and more frequent interim reviews. Therefore, DQC has become of critical importance to ensure a quality product and effective ATRs. The interim reviews will likely be quick turn-around events and require a short focused effort. The DQC process should be incorporated as essential part of study/project development.

Most CW peer reviews utilize standard reporting requirements to document the reviews. For example, the ATR process documentation is prescribed in EC 1165-2-209. However, DQC is delegated to the Districts to conduct and to the MSC's to ensure consistency with the MSC and District Quality Management Plans. The PCX Guild recommends that Districts utilize a process similar to the ATR process as well as best practices to execute the DQC process.

This primer presents a summary of best practices and suggestions to assist with this effort. Information provided here should not be considered formal guidance.

REVIEW REPORT PURPOSE

A DQC Review Report can serve many purposes. The primary purpose is to document the DQC process. Given that all products within a study should be reviewed internally, it's possible to have many review periods during a study's life cycle. Documenting the process provides not only proof of completion it also serves as a repository for comments to date. Capturing the salient points from each review can serve to remind the PDT of critical internal discussions to reduce revisiting the same issues again. It can also help to document lessons learned.

In the new planning paradigm communication will be one key to moving quickly and effectively through the planning process. A review report can also serve as a useful communication tool. It can provide the ATR team with situational awareness prior to beginning its review. Providing a summary of DQC will help reduce to the time it takes for the team to become oriented and may help focus the review. Review reports can also serve as "sound bites" for senior leaders and document items that should be incorporated later in the process.

- Provide a summary of critical comments
- Document critical internal discussions
- Document unresolved comments and the risk
- Repository of comments

Documentation Tool



- Orient the ATR team
- Save time on subsequent reviews
- Provide a sound bite for senior leaders prior to endorsement
- Bring forward items to incorporate in later steps

Communication Tool



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DQC is a process and therefore will cover the life-cycle of a study/product. Over-the-shoulder reviews conducted by supervisors are a critical component of DQC. These are not as easy to document because they may happen on the fly and informally. In the case of the identification of significant technical or policy issues it may be valuable to document the issue, discussion, and resolution for incorporation into later DQC documentation. The documentation can be as simple as a sticky note in the project file or as sophisticated as a formal memorandum for record.

THE REVIEW REPORT

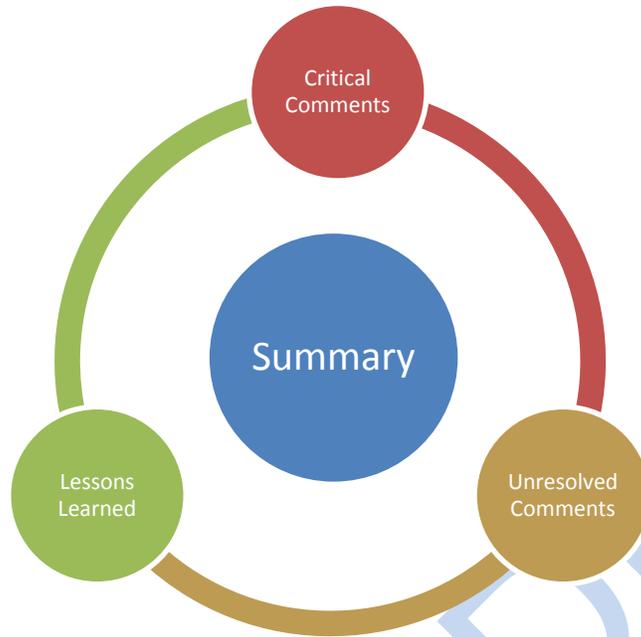
Use of a Review Report is an ATR process best practice that can be adapted to the DQC process. The PCX Guild proposes the use of standard components in to provide consistency between Districts. ***Suggested components are introduction, summary, endorsement, and comments.*** However, it is recognized that DQC is a District responsibility and the review reports may be tailored to fit regional and local Quality Management Plans. The detail of the report should be commensurate with the complexity and length of the product reviewed. Reviews of less complex studies/projects or smaller interim products of a larger effort could be documented with a brief memo. A sample format is presented in Appendix A.



Introduction. A brief introduction section is recommended that presents items such as the product reviewed, the review time frame, DQC team members and the purpose of the product that was reviewed.

Summary. The primary component of the review report should be a summary of the review. The summary should be clear, concise and provide a reasonable explanation of ***critical*** or ***unresolved*** comments and present any ***lessons learned***. The summary should be a “sound bite” of the review with the caveat that a reader could read the detailed comments if he/she desires more information.

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Summary Components

Critical Comments – *Critical* comments are those technical or policy comments that describe a fundamental problem with the work product or articulate a study or project risk that could affect the recommendation or justification of the study. These comments may be those that are flagged as “Critical” in DrChecks or those that have been deemed “significant” by the reviewer(s). It is acknowledged that these terms are subjective and it is incumbent upon the preparer/lead to determine what comments are critical or significant.

Unresolved Comments – Early in the life of a study/project, it is possible that there are unresolved comments. Reviewers may bring up issues that are important but cannot be addressed at the time. It is important to highlight these comments to ensure that they are addressed later in the process. These comments may be those that are flagged as “For Information” in DrChecks. The summary should indicate the plan of action to resolve these comments.

Lessons Learned –It is recommended that the summary mention lessons learned as part of building quality into products. Highlighting issues that may be avoided on other efforts will be valuable to senior leaders to identify trends and reoccurring technical or policy issues.

Signature. It is suggested that the preparer sign the report similar to the signature used on a memorandum for record. The use of electronic signature capabilities is encouraged.

Comments. The review report should also contain ALL the technical comments as an attachment. Editorial comments should not be formally documented.

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DQC BEST PRACTICES

Scoping. Funding needs and scheduling should be included in the Project Management Plan. Deliberate scoping of the DQC process will ensure that funding is provided in a timely manner and the DQC team is allowed adequate time to review products.

Lead Designation. The designation of a Lead for each product or an overall Lead is an ATR best practice that can be adapted to the DQC process. It is preferable that the lead(s) be identified during the preparation of the review plan. It is not recommended that the PDT lead serve as the DQC lead. Suggested candidates include Regional Technical Experts, senior staff (GS12-13), and section chiefs.

Suggested DQC Team Lead Responsibilities

- Develop the DQC Review Report.
- Ensure appropriate qualifications DQC team.
- Communicate directly with the ATR Lead as the project progresses and reviews begin by providing the DQC documentation.
- Identify the significant or critical comments and confirm consistency with the Project Risk Register. In other words, are the significant comments consistent with previously identified areas of risk and uncertainty, or does the Risk Register need to be updated based on the comments?
- Ensure that someone on the DQC team reviews the entire product for consistency and readability, regardless of size or scope.
- Ensure the compilation of the technical (not editorial) comments and their resolution.
- Ensure that the PDT is provided with editorial comments. These comments do not need to be part of the formal documentation.

Team Qualifications. As with ATR teams, DQC team members should be qualified for review of a decision document or an interim product. Supervisors, journeyman peers, and RTS resources with relevant experience are all appropriate to serve as DQC reviewers. It is recommended that the same expertise and qualifications outlined for the ATR team be used for the establishment of the DQC team.

PDT Page Turn. DQC reviews should not be a replacement of a PDT Review. It is recommended that the PDT conduct a “page turn” review. This can be conducted as a group using the charette format or through a desk review.

Technical Writer/Editor. An important component of product quality is the readability particularly for those that will be made available to the public. If possible, a technical writer or

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editor should be used prior to DQC to increase the efficiency of the review. A report that has been technical edited will allow reviewers to focus on technical sufficiency.

Kick-Off Meeting. The ATR process uses kick-off meetings to orient the review team and answer any questions prior to the start of the review. It serves to increase the efficiency of the review. This practice could be easily adapted to the DQC process.

Charge to Reviewers. Providing the review team with a charge is an ATR best practice that could be used to increase the effectiveness of the DQC process. The PCX Guild has developed an ATR Charge to reviewers that is available for adaptation to the DQC process.

Four Part Comment Structure. This structure is required for ATR and is recommended for use by Districts in the DQC process. Use of the structure increases the quality of the comment and reduces the PDT response time. It also makes it easier to assess the consequences of the comment and will assist in the preparation of the summary for the review report.



Editorial vs. Technical Comments. Similar to the ATR process, care should be given by the reviewers to differentiate between editorial and technical comments. Editorial comments are defined as those that do not impact the sufficiency of the project but contribute to the quality of the document. Examples are spelling, grammar, format, language changes, and repetitive comments on a subject when one is sufficient, and minor numerical errors that do not affect the adequacy of the analysis. Editorial comments are valuable to the quality assurance process but DO NOT need to be documented formally. Capturing editorial comments is important to ensure technical writing consistency. Including editorial comments in the formal review documentation increase the time it takes for the team to respond to comments and adds the length of the documentation. Best practices for capturing editorial comments are using the review function in Word or Adobe (track changes, comments), hard copy mark-up, and/or using email to provide a list of revisions and suggestions.

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DrChecks. The use of DrChecks is an ATR best practice that can be adapted to the DQC process. It is required for ATR so most employees are familiar with the system. The system provides easy access and archiving. Also, the system provides a formal way for reviewers to close a comment. Closure of a comment in the system indicates satisfaction with its resolution. The reporting function in the system provides an easy way to compile comments, identify critical and for information comments, and keep track of unresolved issues.

Archiving. The Review Report should be provided to the PDT leader with copies provided to relevant PDT members. The Review Report should be included in the project file, electronically or hard copy. It is the responsibility of the PDT to ensure all Review Reports are appropriately archived.

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Enclosure 1**

DISTRICT QUALITY CONTROL REVIEW REPORT CONTENT TEMPLATE

1. INTRODUCTION

- a. Project/Study Name:
- b. Review Product :
 - i. Type of Product: *[Indicate what type of product was reviewed. Examples would be an interim technical discipline report, a draft feasibility report, or a submittal package]*
 - ii. Purpose of Product: *[Indicate what the purpose of the product is such as an economic assessment of baseline conditions that will be incorporated into the feasibility report or a stability analysis that will be used for design of a structure.*
 - iii. Percent Design: *[Indicate if the product is part of a feasibility study, pre-construction, engineering and design efforts, on-going construction. For planning phase products it is helpful to indicate what planning milestone the study is at.]*
- c. Date of Review:
- d. Review Team Members:

Reviewer Name	Focus of Review	Office Symbol	Phone Number

2. SUMMARY

The [PRODUCT] was reviewed as part of the District Quality Control process. The review comments are provided as Attachment 1. In order to clearly summarize the comments they have been broken out into the following categories

a. Critical Comments – *Critical* comments are those technical or policy comments that describe a fundamental problem with the work product or articulate a study or project risk that could affect the recommendation or justification of the study. These comments are those that are flagged as “Critical” in DrChecks or those that have been deemed “significant” by the reviewer(s). The following summary of critical comments, responses, and resolution is provided for documentation purposes:

[Critical Comments Summary. It is recommended that the 4 part comment structure be used.]

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Enclosure 1

b. Unresolved Comments – Unresolved comments are those that were provided for information or those that need to be resolved later in the product development. The following summary of unresolved comments including the proposed path for resolution are provided as a reminder to the team of items for follow-up:

[Unresolved comments summary, It is recommended that the 4 part comment structure be used.]

c. Lessons Learned – The following items are provided as lessons learned:

[Lesson Learned Summary]

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District Quality Control Best Practices Road Map (Mock up for review purposes)

