Office of Mission Support & E-Enterprise
State & Tribal Quality Assurance Project Plan (QAPP) Project Update
&

EPA Quality Directives Update

August 12, 2020

Briefing to Region 9 Tribal Operations Committee

Project Update

- Today's Takeaways
- Project Overview:
 - Grants Communications
 - National Term & Conditions for Quality Assurance
 - Mission Measure
 - Training & Resource Needs Gap Analysis
- QAPP Project Path Forward
- Quality Directives Update and Path Forward
- Contact Information

Today's Takeaways

- Work is getting done!
- Forming partnerships with the states and tribes
- Producing tools to assist the grantee and EPA in QAPP development, review and approval
- Our project has the attention of the Chief Operating Officer
- Updating our Quality Directives
- Preparing for Agency-wide and state reviews and tribal consultation

Office of Mission Support & E-Enterprise State & Tribal Quality Assurance Project Plan (QAPP) Project Update

Project Overview

- Joint effort between E-Enterprise and OMS
- Result of a 2018 Lean Event
- Formed Workgroups:
 - Grants Communications
 - Grants Terms & Conditions
 - Mission Measure
 - Training & Resource Needs

Striving for Improvements & Consistency

Grants Communications

- Concluded work August 2019
- Produced a:
 - Joint Memorandum stating communications between the grantee and QA staff is permissible (July 9, 2019)
 - Reference document or SOP for use during scoping meetings (August 12, 2019)

National Term & Conditions for QA

- National standardized terminology/boilerplate
 - Provide cut and paste instructions to Project Officers for entering QA terms and conditions into grant documents
 - Flexible to accommodate current practices
- Completed:
 - The DRAFT document. Pending Agency review and implementation approval (FY22)
 - Held working sessions with 29 participants on July 13-14 requesting comments on the DRAFT
- Next steps:
 - Request increased representation from states and tribes
 - Encourage input and feedback through state and tribal workgroup members
 - Staff the DRAFT for approval by management
 - Select priority programmatic QA terms and conditions for consideration

Mission Measure

- % of QAPPs that are reviewed and approved within 60 days (EPA internal time only)
- Reporting has a one-month lag to ensure counting all QAPPs in a given month
- Submitted <u>ten reports</u> to date to OMS with an average of 90% of all QAPPs meeting this measure
- Numbers are also reflected on Regional Bowling Charts
- We are looking at retooling the measure to identify where improvements are needed and identify pain points

Project Summary - A3 Kaizen Chart

A3 Project Name: Improving the Development, Review and Approval of State & Tribal Quality Assurance Project Plans (QAPPs) Program: OMS/EI/OEIP/EQMD Report Date: July 15, 2020

BOX 1: PROJECT DEFINITION

1a. Problem Statement: The time required for EPA to review and approve QAPPs submitted by state and tribal grantees is too long, and QAPP processes are not sufficiently transparent or consistent across EPA regional offices.

1b. Goal: Review & approve 80% of all state and tribal QAPPs received after April 1, 2019, within 60 days by September 30, 2020.

1c. Scope: Includes all state and tribal grantee QAPPs submitted to the EPA Regions and reported to EQMD. These QAPPs do not include state delegated QAPPs.

1d. Approval:

Henry Darwin, Chief Operations Officer

BOX 2: ANALYSIS

- In 2018, OEIP/EQMD partnered with E-Enterprise and held a LEAN Event to address concerns that state and tribal QAPPs were not being developed, reviewed and approved in a timely and consistent manner.
- Four workgroups formed from this effort. The information contained in this A3 describes the on-going work of reporting the Regional QAPP Mission Measure.
- Data collection occurs monthly and is reported using an Excel Workbook in SharePoint. All data is reported on the 15th of each month and there is a one month reporting lag as QAPPs may arrive on the last day of the month, prior to being submitted to the Regional QA Manager.
- This mission measure only calculates internal EPA review time; however the milestones and dates collected easily allow one to see the pain points and where the QAPPs are delayed in the process (i.e., entry into the Region or with the grantee).

Region	June Target	# of Eligible QAPPs	# of Eligible QAPPs approved within 60 days	June Metric Value
R1	70%	3	3	100%
R2	70%	0	0	100%
R3	70%	2	2	100%
R4	70%	2	2	100%
R5	70%	1	1	100%
R6	70%	15	15	100%
R7	70%	1	1	100%
R8	70%	1	1	100%
R9	70%	4	4	100%
R10	70%	5	5	100%
All Regions	70%	34	34	100%

3OX	3: IMPRO	DVEMENT ACTION REGISTR	Y	_					_
	Assigned Date	Action to be Taken	Action Owner	Due Date		Percent	Complete		Completed Date
1	8/1/18	Hold LEAN Kaizen Event	R. Moser	9/13/18	25	50	75	100	9/13/18
2	3/20/20	Met with the Regions to discuss setting targets.	K. Chalfant	3/20/20	25	50	75	100	3/20/20
3	3/20/20	Discuss resetting Regional and OMS targets with COO and required countermeasures.	K. Chalfant	3/31/20	25	50	75	100	4/8/20
4	3/20/20	Determine if reporting zero QAPPs equals 100%.	K. Chalfant	3/31/20	25	50	75	100	4/8/20
5	3/20/20	Inform OCFO, LSASDs and RQAMs of new targets and that OMS should be entering this information in BFS.	J. Wells	4/17/20	25	50	75	100	4/17/20
6	4/8/20	Determine backlog of QAPPs not reviewed & approved within 60 days.	K. Chalfant	5/15/20 7/31/2020	25	50			
7	4/4/19	Term & Conditions: Obtained , revised, coordinate with states and tribes National level T&Cs. Finalize with OEIP management, OGD and OGC.	C. Thoma	8/31/20 11/15/2020	25	50	75	100	
8	4/4/19	Term & Conditions: Obtained, solicited for comments, coordinate with states and tribes individual programmatic T&Cs. Finalize with OEIP management,	C. Thoma	8/31/20 04/15/2021	25	50	75	100	

BOX 6: TEAM	
Name:	Role:
Jeff Wells	Executive Sponsor
Katherine Chalfant	Process Owner
Katherine Chalfant	Project Lead
Naien Costa	Coacii

BOX 7: ISSUES

Backlog - The RQAMs are working to identify criteria to begin counting the QAPP backlog. Met with the NPDES Permit Team on June 22, 2020 to discuss lessons learned when counting OAPPs. The RQAMs have decided that counting the backlog will begin in Oct 2020 (1st QTR FY 21) and will finalize all criteria by the end of July 2020.

Working sessions with the Regions, states and tribes for the term & conditions were held on July 13th & 14th. At the request of Region 1, they have asked for additional time in finalizing a national term & condition. They have cited numerous concerns to include: COVID 19 and tribal engagement, expanding the network of participants and approval of an Agency Quality Policy & Procedure.

BOX 4: RESULTS

Jun	ie		FY	2020 Mi	ission Me	asure B	Bowling Ch	nart				U	pdated 0	7/15/202	.0	
Metric ID	LTPG	Performance Metric Title	Custom Field	JOP	Target Direction		YTD	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
ere one		Tribal and State QAPPs reviewed	34/34	10/31/19	Increasing	Target	70.00%	60.00%	60.00%	60.00%	60.00%	60.00%	65.00%	65.00%	70.00%	70.00%
S16.OMS		and approved within 60 days (%)	=34/34	95.56%	increasing	Actual	100.00%	95.56%	74.42%	92.31%	94.29%	91.30%	88.24%	81.82%	79.25%	100.00%

Beginning in April 2020, targets will be set at the following values: Apr: 65% / May - Jun : 70% / Jul - Aug: 75% / Sep: 80%

This change will cause all Regions to have the same target and set a glidepath for improvement.

Working on identifying Backlog criteria.

month and provides this information to OMS/ORBO for entry into BFS. Regular updates due to project lead by:

BOX 8: PROJECT MANAGEMENT

Day and time for regular update meeting: The Process Owner will update the Executive Sponsor during the EQMD Weekly. The Project Lead confirms all numbers being reported by the 15 of each

The Process Owner will update the Executive Sponsor during the EQMD

External Cost for this project (if any):

BOX 5: STANDARD PROCESS & VISUAL MANAGEMENT

Visual Management in Place

Regions: 2, 3, 5, 7-10 Regions: 1, 4, 6

OMS/ORBO updates BFS and the OMS Bowling Chart

BOX 9: PROGRESS

Project Start Date: Aug 2019

Estimated Project Completed Date: Sep

1 2 3 4 5

BOX 10: SIGNATURE

Executive Sponsor's Signature:

Counting the QAPP Backlog

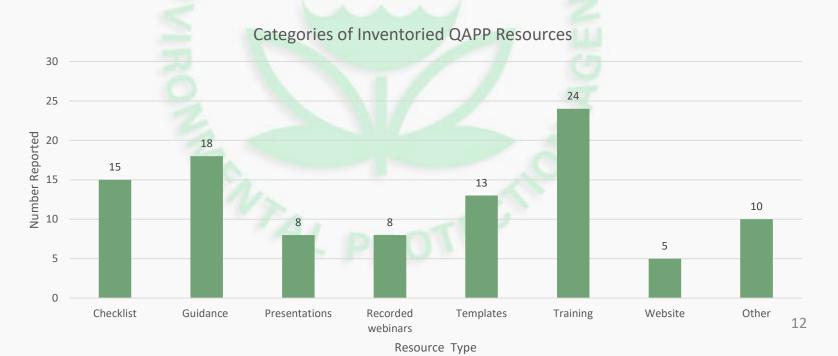
- Bottom line: EPA provides funds to Grantees and before work requiring a QAPP begins, the QAPP must be approved
- This has the attention of the Chief Operating Officer (COO), Henry Darwin
- OMS is working with the Regions to identify counting the backlog of QAPPs not reviewed and approved
- Current Criteria include:
 - Backlog definition: Any state or trial QAPP received after April 1, 2020 that has not been approved in 120 days. This includes EPA and grantee time and counting begins on the day EPA receives the QAPP.
 - Metric: Total backlogged QAPPs approved to date/Total backlogged QAPPs to date.
 - Reporting cycle begins in FY 2021
 - Targets: Will vary amongst Regions and be set to a glidepath.
- Information will be reported monthly to the COO using an A3 visual

Training & Resource Needs Gap Analysis

- Compiled an inventory of 101 resources from Regions and partners that provide information for QAPP development, review and approval in the areas:
 - Air
 - Hazardous waste
 - Water
 - Miscellaneous media and topics
- Developed a nine-question survey
 - Sent to state and tribes asking via Survey Monkey, email and US mail to tribes
 - Available from October 17, November 25, 2019

Training & Resource Needs - Inventory

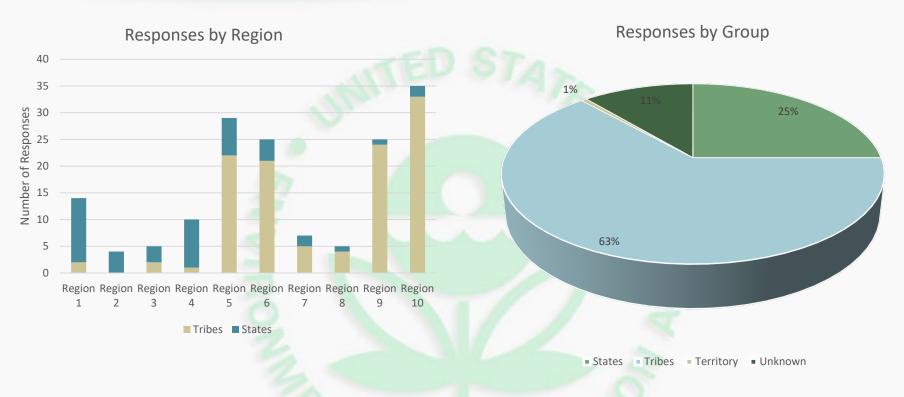
- Received input from Regions and EPA partners
- Complied 101 QAPP training and resources
- Areas include: air, hazardous waste, water and miscellaneous topics
- Types of resources:



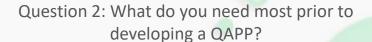
Training & Resource Needs - Inventory

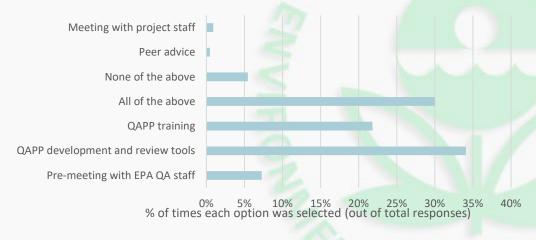
Main Contributors:

- Training ITEP has the most comprehensive training, providing for offerings in various formats
- Guidance Regions 1, 3, 5 and 8, GLNPO, OAR and OW*
- Checklists Regions 1, 3 and 5, GLNPO, OAR and OW*

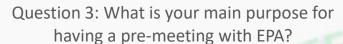


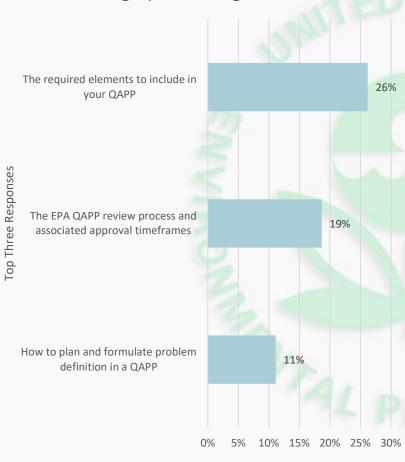
- Question 1 Addresses who is completing the survey
- Received 180 responses from states & tribes via Survey Monkey, email, phone & US mail
- Most responses were received from tribes (63%). The highest number of responses were from western states, which have the highest number of tribes in Regions 9 and 10. States, provided by multiple organizations had the most replies from Regions 1, 4 and 5. The unknown category reflect territories that did not identified their state affiliation and 1% of the replies was unknown.





- Received 220 responses due to the option given for multiple choice answers:
 - Indicates states and tribes are overwhelmingly in a need of QAPP training & a tool to assist in developing QAPPs.
 - Lack of knowledge:
 - In EPA QA-G-5 guidance for developing QAPPs and the associated checklist to develop QAPPs.
 - To locate what actually is needed to develop a QAPP.
 - Where to look for help.
 - What exists as far as Agency-wide resources.
 - Lack in understanding the purpose of a QAPP.
 - 66% of responses are "all of the above" suggest there is a major gap in understanding the concept of QAPP development and what is needed. This could be due to minimal communication between EPA and grantees, staff turnover, or lack of knowledgeable staff.



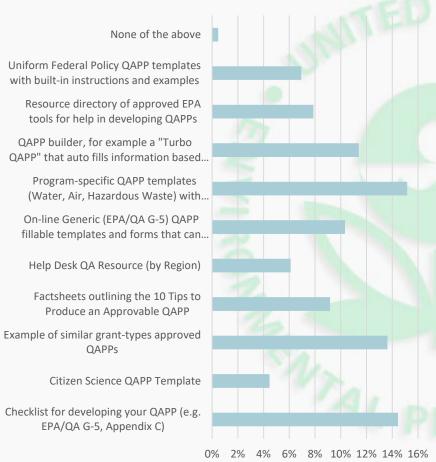


■ % of times each option was selected (out of total responses)

Top replies for this question indicate:

- The grantee is not aware of the critical QAPP elements
 - QAPPs are returned for revisions of critical elements.
 - Critical elements are technical in nature, site specific and related to data generation, sampling and analysis, data validation and data usability
 - Critical elements ensure data is scientific and legally defensible.
 - Grantees need to understand QA R-5 and G-5 requirements.
- The need for assistance in addressing the projects' problem definition:
 - Grantees are not familiar with requirements
 - Experience challenges describing the purpose of their project and how to include this in a QAPP,
 - Most QA tools, resources and checklists are available in the existing inventory, suggesting EPA needs to educate the grantee on the basic fundaments of QAPP development,
- The grantee is unclear about EPA's review and approval. processes and timeframe indicating:
 - Better communications.
 - Updated guidance on the review and approvals process.

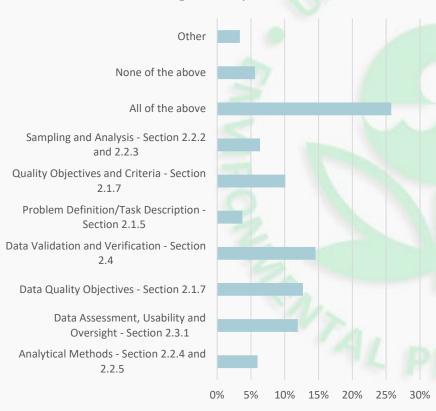
Question 4: What tools would provide the most assistance in developing your QAPP?



- Grantees are looking for easier way of preparing QAPPs.
- Preferences indicate fillable templates and QAPP builders. The difficulty with this is that requirements vary for each program Templates could address the generic QAPP structure and critical elements, but the knowledge in addressing the project specifics, data usability and decisions needed to be made based on this data. The existing inventory shows that there are plenty of program specific templates and checklist available to aid the QAPP preparers. EPA should make these templates available to grantees.
- Communicating existing QA tools appears to be the predominant issue.
- Grantees indicate they need a checklist for QAPP preparation. This list is located in QA G-5, but information about the usability of the checklist as a QAPP preparation tool is unknown, which confirms the lack of coordination, education and communication between the EPA and grantees.
 - The Uniformed QAPP checklist format is also readily available and could be used for all programs.

^{■ %} of times each option was selected (out of total responses)

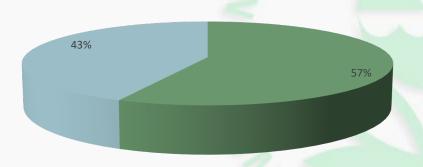
Question 5: What sections of the EPA/QA G-5 QAPP guidance do you need assistance with during development?



■ % of times each option was selected (out of total responses)

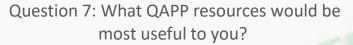
- 66% for "all of the above" answered needed assistance during QAPP preparation based on QA G-5 indicates that grantees have difficulties in addressing the critical elements of a QAPP, problem formulation, data quality objectives, data validation and usability and data assessment.
- These elements are mainly technical and in order to be properly addressed, they require specific knowledge about the project for which QAPP is written for and the ability of the QAPP preparer to understand what kind of data is needed and how best to generate this data.
- No template or fillable QAPP template or uniformed checklist could answer these questions.
- EPA could assist the grantee in these critical areas by offering technical assistance to QAPP preparers and by offering pre-meetings to answer these questions.
- This requires collaboration between the EPA and the grantee.
 - Trainings for these specific critical elements may be overwhelming, therefore strengthened communications between EPA and QAPP preparers based on the specific needs is a must.

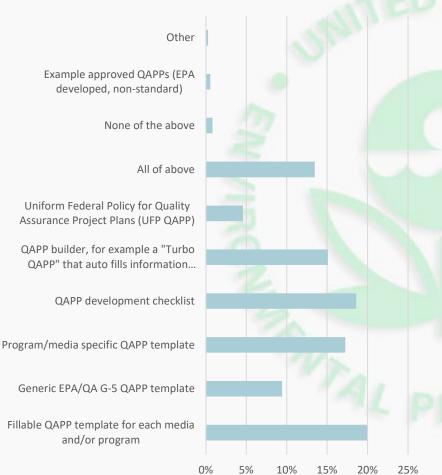
Question 6: Do you use the EPA R-5 or the EPA G-5 checklist (Appendix C) to assist you with reviewing your QAPP?



Yes No

- It is surprising to see that there is almost a 50/50 divide in the replies for using and not using the QA G-5 checklist.
- The QA G-5 checklist is most commonly used checklist and in many Regions the only tool used for preparing and reviewing QAPPs.
- This checklist contains all critical elements for QAPP development and review. If followed and if technical assistance is provided when preparing QAPPs, the QAPPs approval rate may dramatically increase. This suggest that the EPA may need to communicate the importance of this tool.

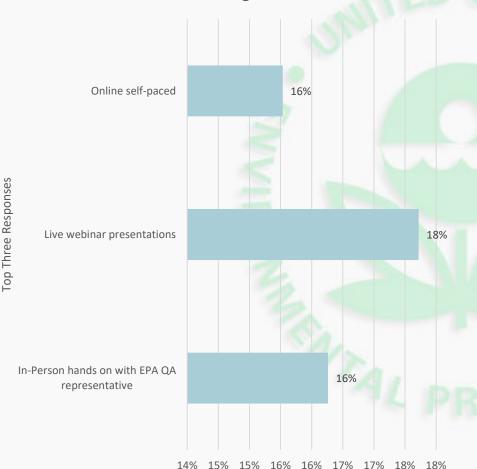




% of times each option was selected (out of total responses)

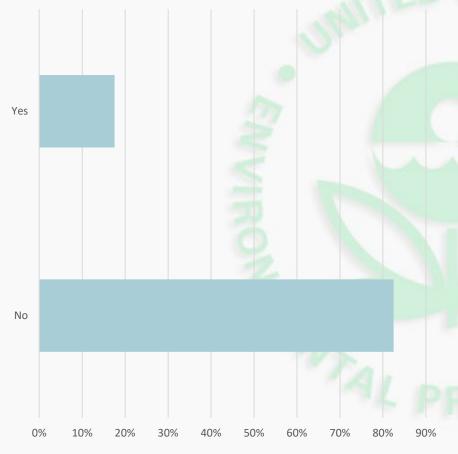
- Similarly to Questions 4 and 6 replies indicate grantees want fillable QAPP templates, program specific fillable templates and QAPP development checklist.
- The responses to Question 7 again highlight what has been stated in Questions 4, 5 and 6. All requested QA tools already exist under one form or another and for various media. The answers to this question demonstrate the need for improved communication between the EPA and grantee.
- Not knowing what existing QA resources exist in assisting grantee in preparing an approvable QAPP creates a major challenge for both the EPA and grantee.
- The existing QA inventory indicates that they are various tools and templates that could be used in assisting. It is impossible to have a fillable QAPP for each media that will not require technical and project specific knowledge. This requires the EPA to educate our grantees of what is available, how to look for it, how to decide what to use and how to use it.
- EPA needs to provide technical assistance regarding the critical areas in QAPP development and assist in identifying project specific.

Question 8: Which is the most effective delivery method to receive QAPP training for your environmental organization?



- Overwhelmingly, these replies response to what kind of training is needed, point to the human interaction factor between the EPA and grantee.
- Live webinar, in person or hands on training, QA national meetings and training events, all indicate that grantees prefer face to face interactive communication with the EPA, allowing for questions and answers.
- Online self-paced courses are the least preferred training method.

Question 9: Do you have any additional comments and suggestions?



- There we no additional comments and suggestions for this question.
- It is important to note that there were numerous comments in the comment section for each questions.
 These comments were reviewed, categorized, summarized and fit into most appropriate existing answer choice.

Gap Analysis

- The inventory indicates that QAPP resources are available
- Communication from EPA to grantees regarding the location and availability needs improvement
- Making use of existing QA R-5 and existing G-5 checklist is recommended
- Fillable QAPPs is difficult to provide due to programspecific requirements; however critical QAPP elements is possible
- EPA should recognize and endorse the ITEP QAPP as a model source

QAPP Project Path Forward

EPA needs to:

- Finalize national term and condition document for FY2021 implementation
- Initiate pilot for standardization of programmatic terms and conditions
- Finalize criteria for counting the QAPP backlog
- Review the inventory and determine the value of the available QAPP resources
- Communicate the location and availability of specific regional resources
- Ensure state review and tribal consultation of the Quality Directives occurs in 4th QTR FY 2020
- Update the QA R-5 to an EPA Standard and update the G-5 checklist
- Share the G-5 checklist prior to QAPP development and use this checklist for QAPP review
- Develop a fillable QAPP for critical QAPP elements and include this in the update to QA R-5 and G-5
- Develop a memorandum recognizing and endorsing the ITEP QAPP as a model source
- Share QAPP review and approval information at in August 2020 at the Tribal Lands
 & Environmental Forum

EPA's Environmental Information Quality Policy & Procedure Update

Policy & Procedure Purpose

- Define the policy and program requirements for:
 - EPA organizations
 - Non-EPA organizations who have QA written into an extramural agreement
- Address the collection, production, evaluation and use of environmental information
- Establish consistency with national consensus standards for Quality Management Systems adopted by the American Society for Quality /American National Standards Institute E4:2014
- Incorporate relevant information from CIO 2106 and references applicable existing EPA quality-related policies and requirements

Key Milestones

Completed Activities

SAC Approval: 8/1/2017

Directives
Initiation Form to
OCAPPM:
10/19/2017

OEIP Director Project Charter Approval: 12/2/2017 QA Community Workgroup Convened: 1/29/2018

Completed Activities

Draft Policy & Procedure: 1/29/2018 – 9/28/2018

Internal Review: 10/1/2018 -11/9/2018 Directives Technical Review: 2/10/2020 - 4/5/2020 Briefings to CIO, QCIX, LSASDDs, MSDDs & CIO SAC: 6/3/2020 -8/6/2020

Ten Months

45-Day

Two Months

- Two Months

Completed Activities

Tribal Consultation

Future Activities

OGC & LER Review 7/20/2020 - 8/3/2020

Agency - Wide Review & Tribal Consultation ~August 2020

Five Months

CIO Approval: ~November 2020

~ Two Weeks

80 Days (Includes review & comment, consolidation of comments and response to comments.)

Two Weeks

Proposed Changes

- Be consistent with ASQ/ANSI E4: 2014 principles rather than conformance to minimum requirements
- Use the term "Environmental Information" vs "Environmental Data"
- Use the phrase "collection, production, evaluation, or use of environmental information" and collectively refer to this phrase as "Environmental Information Operations"
- Reference existing quality-related policies and procedures
- Have AAs and RAs conduct an annual certification of the quality of their data as written in the 2018, FMFIA response to the OIG/GAO proposed weakness (Asking OGC if this responsibility may be delegated)
- Rescind CIO 2106

Proposed Changes - Cont.

- Environmental Measurement
- Environmental Models
- Environmental Technology
- Existing Data
- Extramural Agreements
- Field Activities
- Primary Data
- All EPA Products & Services
- · Administrative Data Systems
- Environmental Information
- Financial Data Systems
- Grants Management Data
- Information Quality Guidelines
- Notification Process
- Peer Review Policy



CIO 2105

New QA-Related Topics

- Field Activities (CIO 2105-P2)
 - Notification Procedure (CIO 2105-P3)
- Geospatial
- Scientific Integrity Policy
- Forum on Environmental Measurements
- Lab Competency Assessments
- Citizen Science
- Crowdsourcing
- Social Science

- * Included in CIO 2105 update
- * Not included in CIO 2105 update

Tribal Consultation

- Extend the tribal review & comment period to 45 days
- Focus your review on extramural agreements
- Provide comments via:
 - Two Webinars (announced via memorandum)
 - Email comments to: quality@epa.gov
 - TCOTS

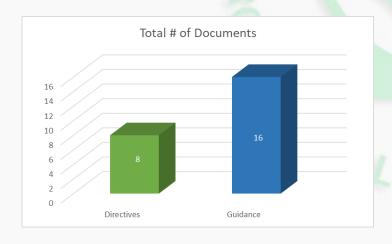
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Directives - Next Steps

- Incorporate OGC comments
- Work with OCAPPM for Agency-wide review and simultaneously conduct state review and tribal consultation
- Approve the updated Policy and Procedure and rescind CIO 2106

Review, update and rescind the suite of Quality documents

- Consolidate lessons learned
- Provide training





Contact Information

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- Audrey L. Johnson Region 9 QA Manager 415-972-3431, <u>Johnson.AudreyL@epa.gov</u>
- Cynthia Naha Santo Domingo Tribe, E-Enterprise Leadership Council Representative (Terms & Conditions) cnaha@kewa-nsn.us