



Reviewing the MR-QAPP: Regulator Perspective

JUNE 5, 2024

UFP-QAPP Policy and Applicability

- ❑ The Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP) is a tool to guide project teams through the systematic planning process.
- ❑ UFP-QAPP Munitions Response Toolkit
 - Module 1 - Remedial Investigation (RI)/Feasibility Study (FS)
 - Module 2 - Remedial Action (RA)
- ❑ EPA and DoD signed both as a voluntary consensus standard

UFP QAPP info and other information at:

<https://www.epa.gov/fedfac/assuring-quality-federal-cleanups>

MMRP Unique Challenges

- ❑ No promulgated regulatory standards or “safe” levels
- ❑ Unique risks
 - Acute hazard
 - Direct interaction may cause serious injury or death
 - Discrete hazardous items, not plumes
 - Attractive nuisance

Remedial Action

- Focus on remedy

- Data needs

- Execute the remedy specified in the ROD
- Demonstrate the remedy was implemented as specified
- Demonstrate the remedy was protective

- Focus on individual munitions

- Types on munitions and vertical boundaries
- Rigorous quality considerations

- Defensibility

What is the remedy?

- Record of Decision (ROD)
 - Assumptions
 - Goals
 - UU/UE
- What data do you need to collect to prove you have achieved the remedy?
- UU/UE may come with extra steps in the process (see example in Module 2)

ROD guides the RA

- Data needs
 - Implement the remedy specified in the ROD
 - Assemble data to demonstrate goals of the ROD were achieved
- Some RODs may not provide all the information needed
 - It will need to be developed in the RA planning
- What are key decision points in the process?

Data Quality

- ❑ Effective QA/QC critical for stakeholder acceptance
- ❑ Clear and specific objectives necessary
- ❑ Basis for well-informed data driven decisions
- ❑ Inform regulators of issues promptly

Key MR-QAPP Worksheets

WS #10: Conceptual Site Model (CSM)

WS #11: Data Quality Objectives (DQO)

WS #17: Sampling Design and Project Workflow

WS #12: Measurement Performance Criteria (MPC)

WS #9: Project Planning Sessions

WS #37: Data Usability Assessment (DUA)

WS #6: Communication Pathways and Procedures

WS #10: Conceptual Site Model (CSM)

- Major elements of the CSM include
 - Facility profile,
 - Physical profile,
 - Release profile, and
 - Land use and exposure profile

- Does the CSM match? Has it been updated and consistent with previous work (RI/FS, etc.)

- Include vertical depth profile for munitions

WS #11: Data Quality Objectives (DQO)

- ❑ **Remedial action objectives:** General descriptions contained in the ROD of what the cleanup will accomplish.
- ❑ **Remediation goals:** Clean-up levels the remedy is expected to achieve that are protective of human health and the environment.
- ❑ **Remedy components:** Treatment, engineering controls, institutional controls, and monitoring.

WS #11: Data Quality Objectives (DQO)

Table 11-1: Summary of Selected Remedy

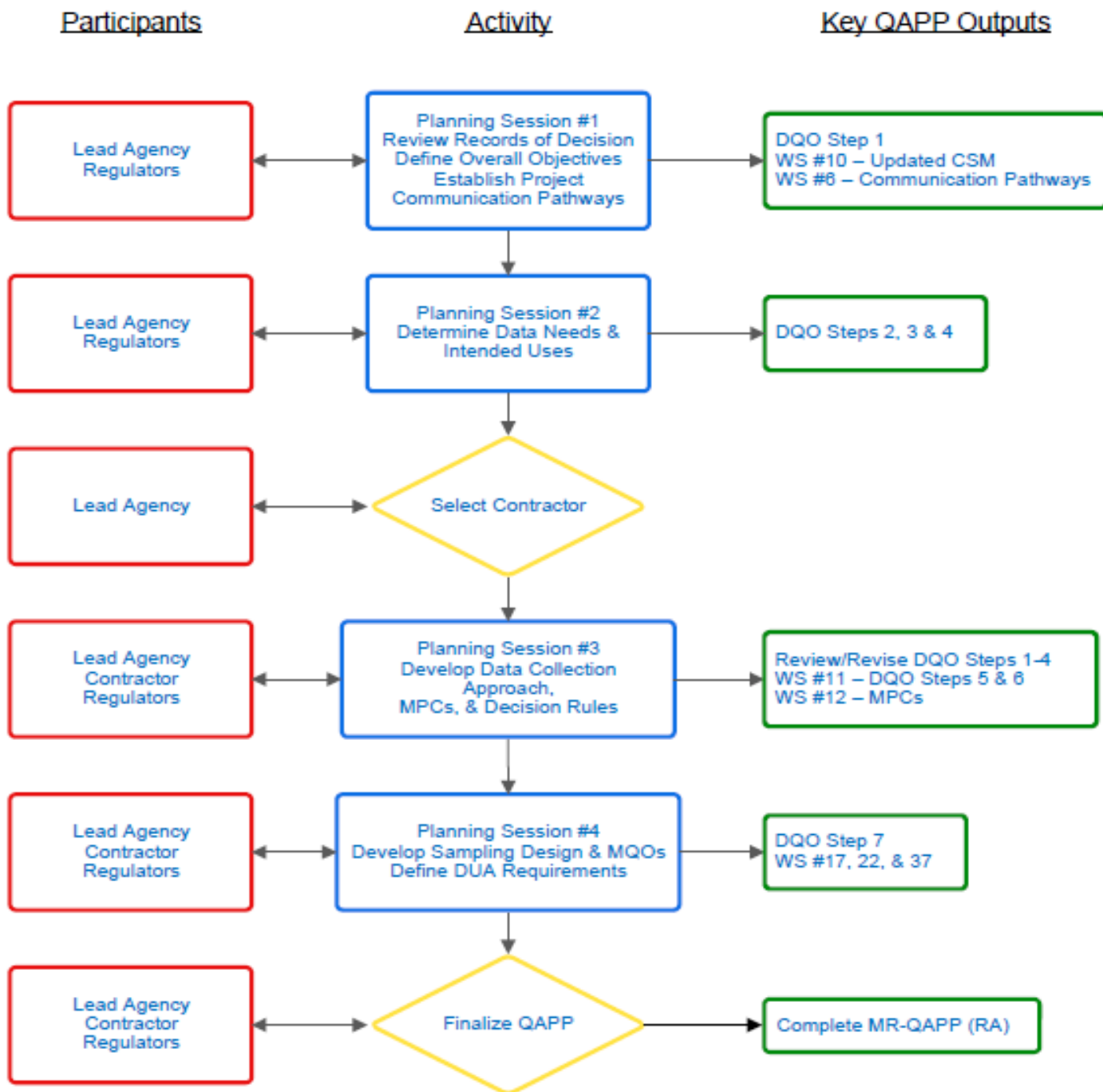
MRS/Selected Remedy	Remedial Action Objectives	Selected Remedy Components		
		MEC Removal	MEC Treatment	Land-Use Controls ¹²
<p>MRS A1 Maneuver Area Development Area</p> <p>Alternative # __</p> <p>MEC surface and subsurface removal using non-AGC DGM detection and cued AGC with interim land use controls</p>	<p>Remove MEC in the surface and subsurface</p> <p>Remedial action is designed to achieve UU/UE</p> <p><u>MEC Removal Remediation Goal:</u></p> <p>Detection and removal of:</p> <ul style="list-style-type: none"> • 60-mm mortar to a minimum depth of 0.45 m bgs • Practice hand grenades, signals, flares, pyrotechnics, 2.36" practice rockets, and practice anti-tank mines to a depth of 0.30 m bgs • Any other munitions present on the site that are detectable at the anomaly selection criteria 	<p>Anomaly detection using non-AGC DGM</p> <p>TOI selection using cued AGC</p> <p>TOI investigation and source removal using manual and backhoe-assisted excavation</p>	<p>All recovered MEC to be detonated in place or otherwise destroyed on-site</p>	<p>Add interim LUCs if specified in applicable decision document (DD)</p> <p>Upon successful remediation, LUCs will be removed</p>

WS #17: Sampling Design and Project Workflow

- ❑ Describes and justifies the design for remedies to be implemented
- ❑ Must include:
 - ❑ A map showing physical boundaries for the area(s) under study.
 - ❑ The basis for dividing the site into survey units and how they will be managed at each phase of the process.
 - ❑ Decision-logic diagrams
 - ❑ Concise descriptions for each DFW.
 - ❑ Contingencies in the event field conditions are different than expected and could have affect the survey design
 - ❑ Points in the process at which lead organization, regulatory, and stakeholder interface will occur, as agreed upon during project planning

Worksheet #12: Measurement Performance Criteria

- Seeds are vitally important for regulator acceptance
- Does the project seeding plan make sense? Is it robust enough?

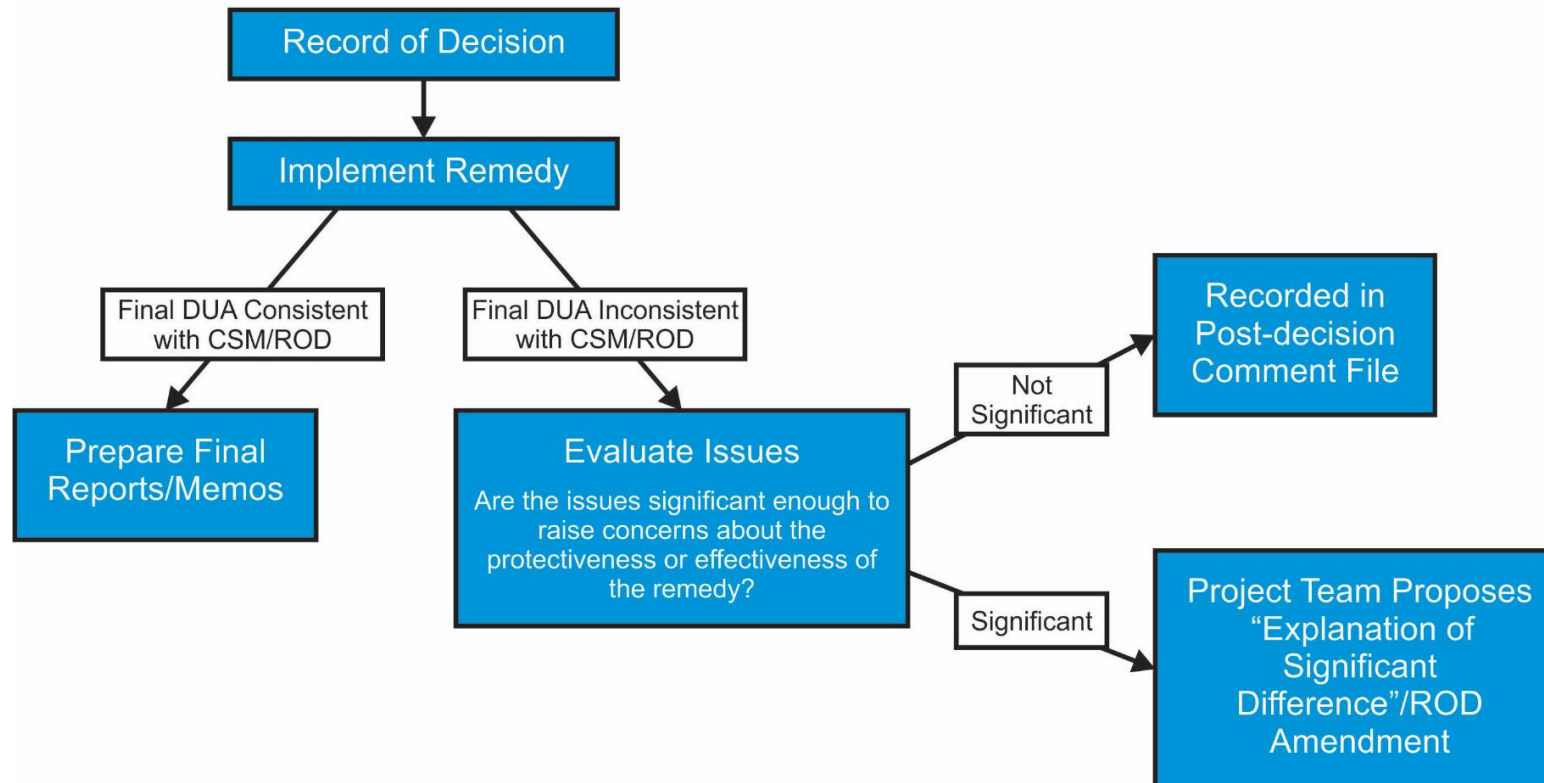


WS #9: Project Planning Sessions

- o Regulator participation necessary for successful project planning
- o Define the PWS
- o Do the process right

WS #37: Data Usability Assessment (DUA)

Remedial Action Approach



WS #6: Communication Pathways and Procedures

- Documents specific issues that trigger formal communication with other project personnel or stakeholders
- Regulators should have input and agreement prior to contractor onboard

Final thoughts

- Follow the process, it was designed for a reason
- Checklist
- Additional training



Questions?

Contact Info:

Doug Maddox, P.E.

US EPA Federal Facilities Restoration
and Reuse Office

maddox.doug@epa.gov

202-669-3321