

WHEN IS AN RI NOT AN RI?

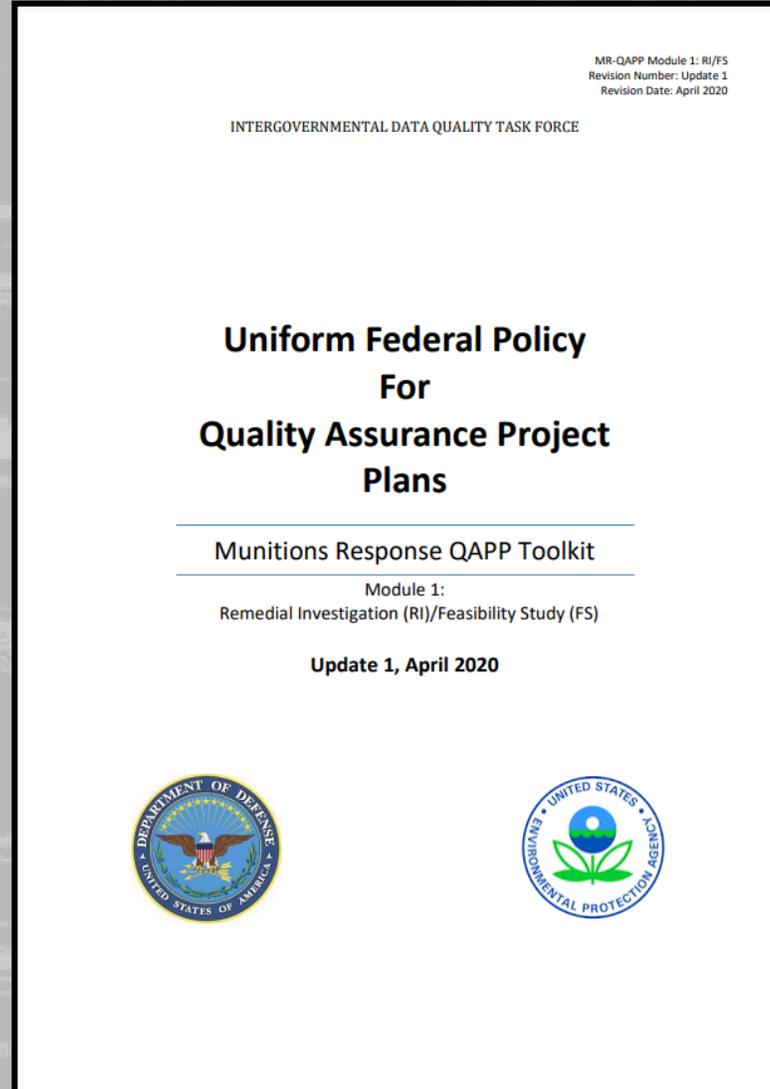
Planning for “Desktop” Remedial Investigations

*James Salisbury (EM CX)
Munitions Response Meeting
4 April 2023*

“The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation.”



**US Army Corps
of Engineers®**



Word of the Day: Jan 18, 2019

perfunctory

adjective [per-fuhngk-tuh-ree]

performed merely as a routine duty; hasty
and superficial.



WHAT IS A “DESKTOP” REMEDIAL INVESTIGATION?



- ❖ Remedial investigations that...
 - Are based on data collected during previous projects
- AND**
- Do not involve field data collection
- ... are typically called “Desktop” RIs
- ❖ “Desktop” RIs
 - Collate existing data
 - Use that data to
 - Characterize the site
 - Make conclusions about site risks



“It’s okay! It’s only a desktop RI!”



BUT THIS CAN GIVE THE WRONG IMPRESSION



- ❖ The term “desktop RI” is sometimes misinterpreted as “superficial” RI
 - i.e., an RI that’s “just a formality”
 - *“It’s okay! It’s **only** a desktop RI!”*
- ❖ Leads to an (incorrect) assumption that the “desktop RI” should simply validate prior work
 - i.e., we present the results and conclusions of prior work as accepted
- ❖ But that’s **not** what an RI does!
 - Involves data collection **and evaluation**

What are other words for “desktop RI”?

Superficial, offhand, sketchy, perfunctory, half-baked, haphazard, sloppy?

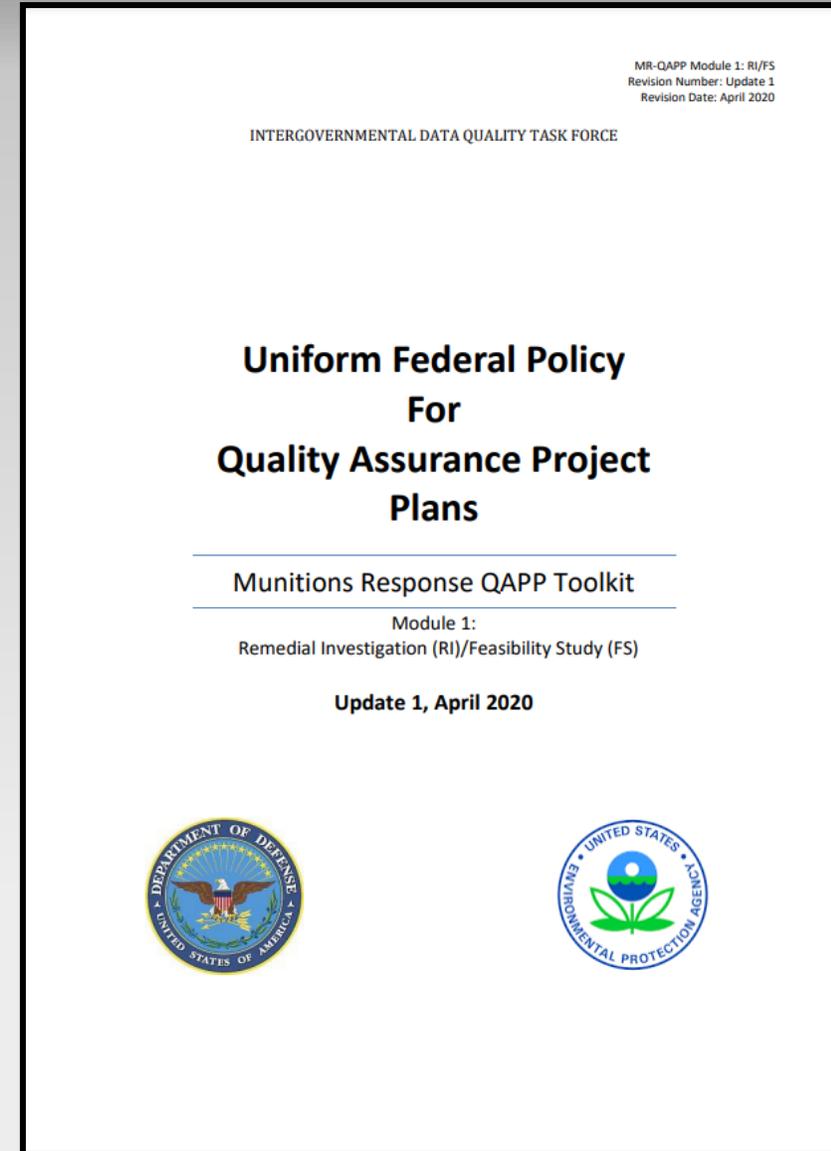
Uh, no...



THE SHOCKING TRUTH



- ❖ There's actually *no such thing* as a “desktop” RI
 - It's not an official term
 - They're all “RIs”
- ❖ That means we **STILL** need to
 - Agree on project goals
 - Collate the existing data
 - Evaluate that data
 - Including Data Usability Assessment
 - Acknowledge and document data gaps
 - Make characterization conclusions
 - Conduct a baseline risk assessment
- ❖ And we **STILL** need the systematic planning process (SPP)!





NOW THE REALLY MIND-BLOWING PART...



- ❖ We still need an MR-QAPP!
- ❖ Yes, we need an MR-QAPP
 - At minimum
 - WS #1 & 2: Title and Approval Page
 - WS #9: SPP Summary
 - WS #10: Conceptual Site Model
 - WS #11: Data Quality Objectives
 - WS #12: MPCs
 - WS #17: Project Workflow
 - WS #13: Secondary Data
 - WS #29: Documents and Records
 - WS #37: Data Usability Assessment
 - Other sheets can be added by the PDT, as needed

MR-QAPP Module 1: RI/FS
Revision Number: Update 1
Revision Date: April 2020
Page iv

Table of Contents

Preface	1
Table 1. Crosswalk: Optimized UFP-QAPP Worksheets to MR-QAPP Module 1: RI/FS	3
Uses and Limitations of Analog Technology	
Glossary.....	
Part 1 – Abbreviations and Acronyms.....	
Part 2 – Definitions	
Worksheet #1 & 2: Title and Approval Page.....	
Worksheet #3 & 5: Project Organization and QAPP Distribution	
Figure 3-1. Project Organizational Structure	
Figure 3-2. Explosives Safety Operations Organizational Structure	
Worksheet #4, 7 & 8: Personnel Qualifications and Sign-off Sheet.....	
Table 4-1. DoD Personnel (add new entries).....	
Table 4-2. Prime Contractor and Subcontractors.....	
Table 4-3. Explosives Safety Operations Organization	
Worksheet #6: Communication Pathways and Procedures	
Table 6-1. Communication Pathways and Procedures	
Worksheet #9: Project Planning Session Summary	
Figure 9-1. Example Project Planning Process for a Phased RI/FS.....	
Figure 9-1. Example Project Planning Process for a Phased RI/FS.....	
Worksheet #10: Conceptual Site Model	
Table 10-1. Overview of Preliminary Conceptual Site Model, Camp	
Table 10-2. Overview of Preliminary Conceptual Site Model, Camp	
Worksheet #11: Data Quality Objectives	
Table 11-1. Munitions known/suspected to be present at Camp	
Worksheet #12: Measurement Performance Criteria (MPC)	
Table 12-1. Measurement Performance Criteria	
Worksheet #13: Secondary Data Uses and Limitations	
Table 13-1. Secondary Data Uses and Limitations.....	
Worksheet #14 & 16: Project Tasks and Schedule.....	

MR-QAPP Module 1: RI/FS
Revision Number: Update 1
Revision Date: April 2020
Page v

Table 14-1. Project Tasks and Schedule.....	63
Worksheet #17: Sampling Design and Project Work Flow	67
Figure 17-1. Work Flow Diagram Preliminary MRS Characterization [Example]	68
Figure 17-2. Work Flow Diagram HD Area Characterization [Example]	69
Figure 17-3. Work Flow Diagram LD Area Characterization [Example]	70
Worksheet #22: Equipment Testing, Inspection, and Quality Control	93
Table 22-1. Site Preparation	93
Table 22-2. Preliminary Characterization (To delineate HD and LD areas)	96
Table 22-3. HD Area Characterization – Detection Survey	99
Table 22-4. HD Area Characterization – Cueing Survey	104
Table 22-5. Intrusive Investigation.....	107
Worksheet #29: Data Management, Project Documents, and Records.....	109
Table 29-1. Minimum Required Documents and Records	109
Worksheet #31, 32 & 33: Assessments and Corrective Action.....	112
Table 31-1. Assessment Schedule	112
Worksheet #34: Data Verification, Validation, and Usability Inputs	113
Table 34-1. Data Verification, Validation and Usability Inputs	113
Worksheet #35: Data Verification and Validation Procedures	115
Table 35-1. Data Verification and Validation Procedures.....	115
Worksheet #37: Data Usability Assessment (DUA).....	116
Appendix A: Preliminary MRS Characterization Memorandum Excerpts.....	129
Appendix B: Detailed Characterization Technical Memorandum Excerpts	133



AND IF THAT DIDN'T BLOW YOUR MINDS...



- ❖ **The PDT still needs to**
 - Hold SPP meetings to discuss the approach
 - Describe the initial CSM
 - Including any remaining data gaps
 - Hopefully, there won't be (m)any in this case
 - Develop DQOs, including
 - Goals, data needs, and decision rules
 - Agree on MPCs
 - Document secondary data
 - In this case, this is all the RI will be based on
 - Describe how we will evaluate the usability of the secondary data
 - The “technical approach”
 - Includes data usability assessments (DUAs)
 - Get approval(s) if we are basing decisions solely on analog data





THE GOOD NEWS



- ❖ If we follow the established process, our RI conclusions
 - **Will** be the product of a formal process
 - **Will** be based on usable data
 - That meets MPCs
 - **Will** be defensible
 - **Won't** just be accepting prior results
 - **Should** be concurred by the SPP Team

- ❖ And then we **can** relax a little more
 - Maybe...



“It’s okay! I followed the SPP, developed DQOs, AND evaluated all the secondary data!”



CONCLUSIONS



- ❖ “Desktop” RI \neq Superficial RI
- ❖ “Desktop” RIs are still RIs!
 - We still need to agree on goals and plan for data evaluation
 - Include DQOs and MPCs
 - List secondary data and limitations
 - Don’t forget the DUA!
 - We still need a document to formalize those details
 - QAPP is the best format for this
 - And WS#13 is a big deal
 - This all needs discussion and review
 - e.g., SPP meetings and document reviews



We’re not just rubber stamping the prior work!



QUESTIONS OR COMMENTS?

