



ONE PROJECT, ONE TEAM: LESSONS LEARNED IN MILITARY MUNITIONS RESPONSE PROGRAM (MMRP) CONTRACTING AND SYSTEMATIC PLANNING PROCESS

15 February 2023

Amanda Sticker

John Jackson



US Army Corps
of Engineers®



AGENDA



USACE Programmatic Business Process

Systematic Planning Process

- SPP Sessions 1 & 2
- UFP-QAPP Worksheets 9, 10, and 11
- Discussions Prior to Solicitation

Military Munitions Response Program

- Importance of characterizing an MRS with geophysical sensor data that is digitally recorded and geo-referenced, accompanied by a clear audit trail of pertinent analyses and resulting decisions.
- Analog Methods

SPP → Awarding the Contract

Lesson Learned Throughout



OPERATING PRINCIPLES/BUSINESS PROCESS IMPERATIVES



ER 5-1-11 states the five operating principles shall govern all work, both project and non-project work, performed by USACE. These principles include:

1. **Plan for success** and **keep commitments**

2. **Quality:** Measure quality with the goals and expectations of the customer in mind

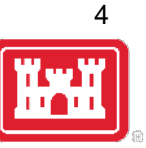
3. **Communication:** Build effective communication into all activities and processes

4. **Best Practices:** Use best practices and seek **continual improvement**

5. **AIS:** Use corporate **automated information systems** consistently and accurately



PROJECT DELIVERY BUSINESS PROCESS (PDBP)



Three (3) complementary imperatives govern the successful completion of projects:



One Team, One Project, One PM



PMP: Manage all Projects with a PMP



PDT: The PDT is responsible for project success

The heart of PDBP is results-focused teamwork

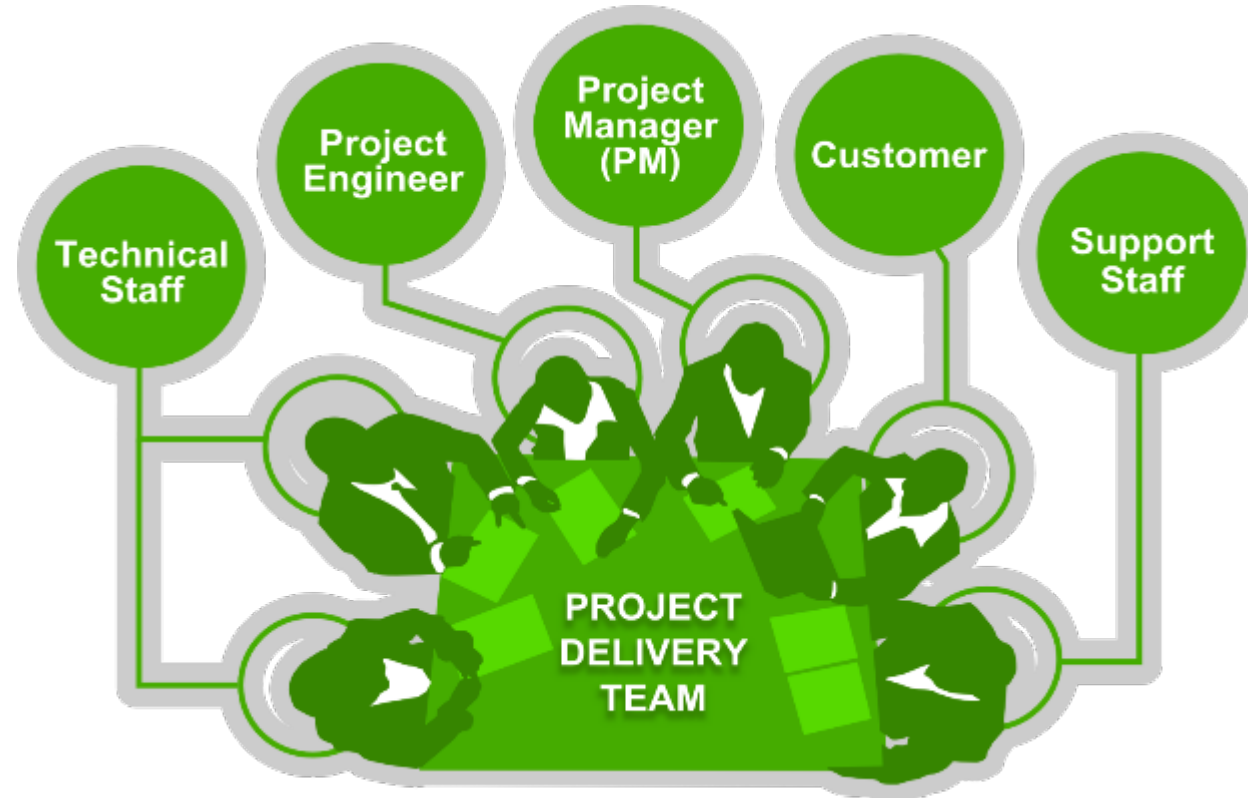


PDBP IMPERATIVE 1:

1 PROJECT, 1 TEAM, 1 PM



- PDT (Project Delivery Team) consists of everyone necessary for successful development and execution of all phases of the project
- **Stakeholders** are an integral part of the PDT





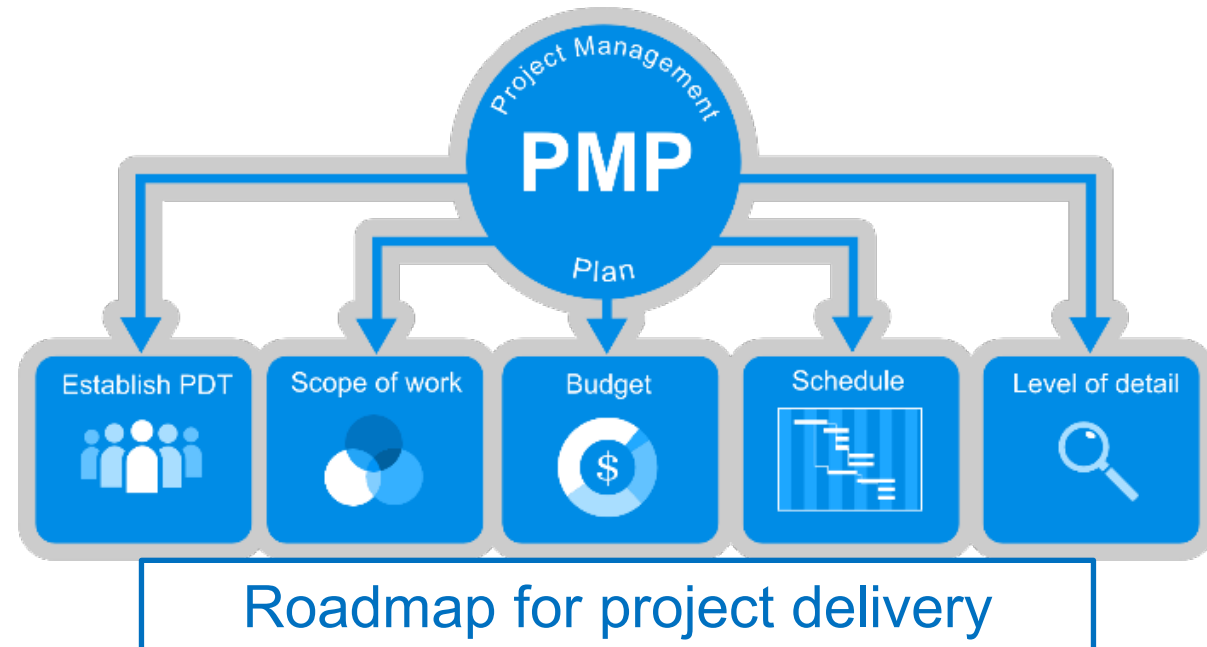
PDBP IMPERATIVE 2: MANAGE WITH A PMP



- **Project Management Plan (PMP):** PM & PDT develop and maintain the PMP
- **Agreement** between USACE and stakeholders that define project objectives
- **Signatures:** *Should be signed by all PDT members, includes stakeholder approval but not required to sign (* may use alternative methods for confirmation regarding stakeholders)
- **Living document**, but still a commitment from all PDT members
- **Scalable:** PMP is a scalable based on size and complexity of the project

Project Mgmt Plan:

- Scope of Work
- Budget plan
- Schedule plan
- Risk Mgmt plan
- Change Mgmt
- Comms plan
- Acquisition plan
- Quality Mgt plan
- Other plans

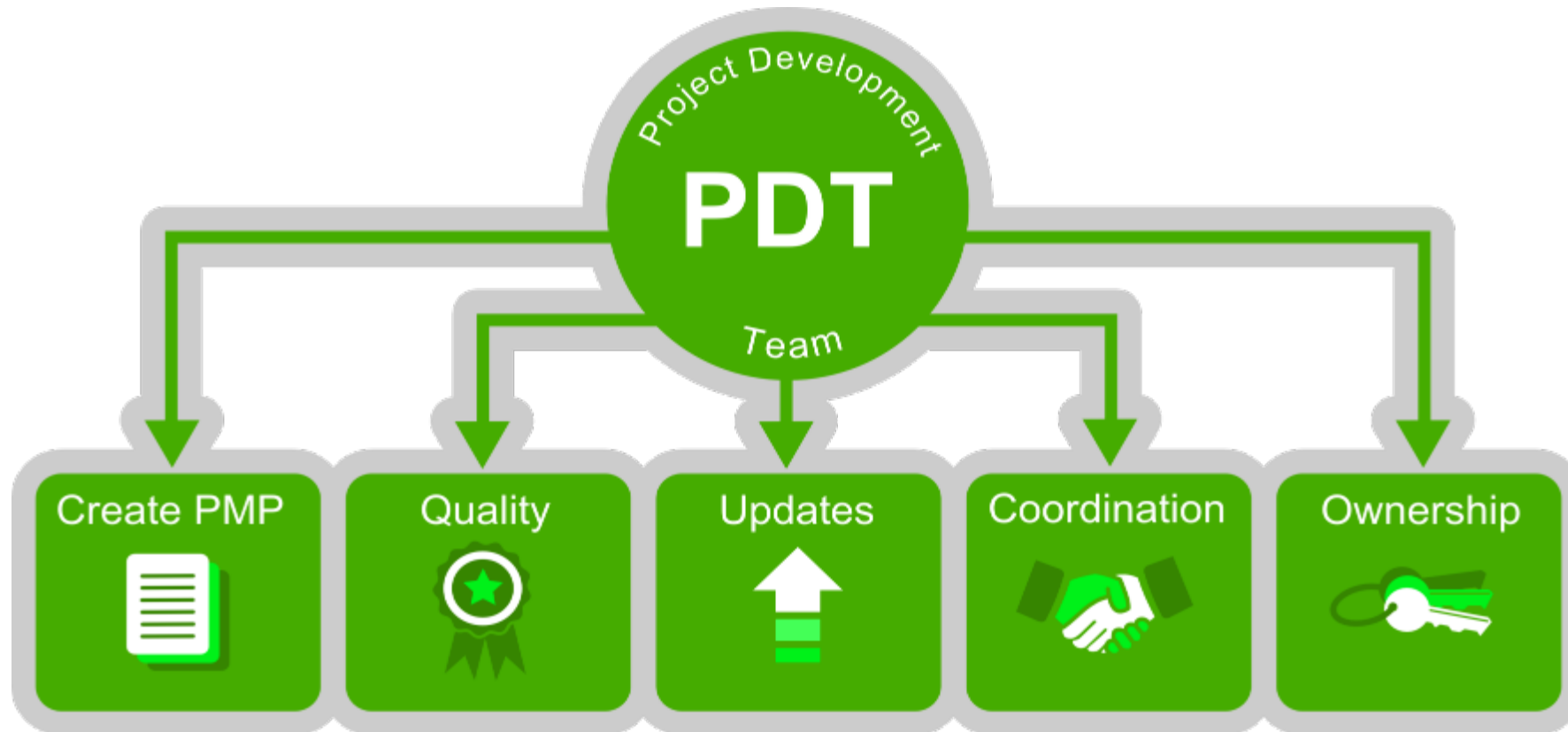




PDBP IMPERATIVE 3: PDT RESPONSIBLE FOR PROJECT SUCCESS



Deliver Quality Projects on Time, on Budget, Safely



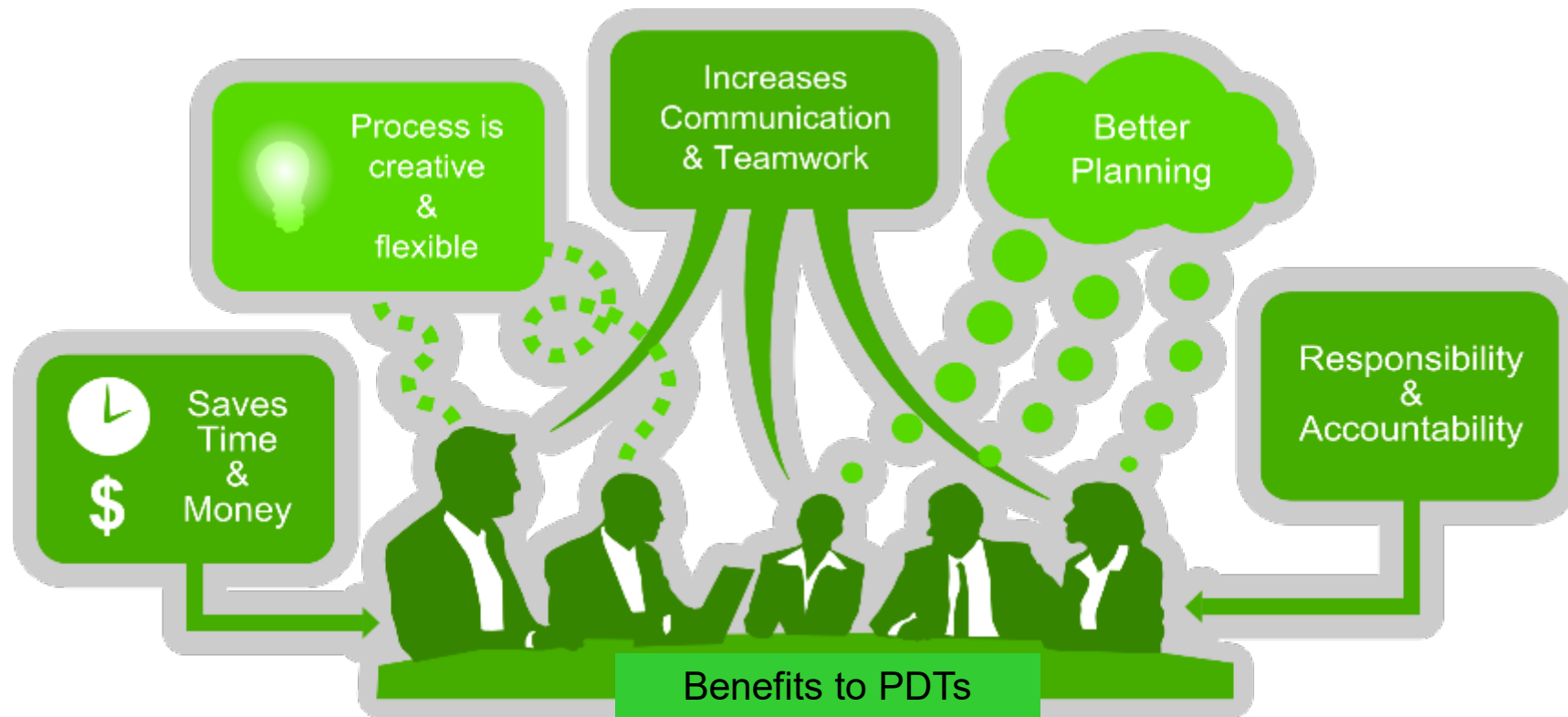
The PDT is empowered to make decisions in support of the project and the PMP
Key: Understanding when to escalate an issue that is affecting project delivery



PDBP IMPERATIVE 3

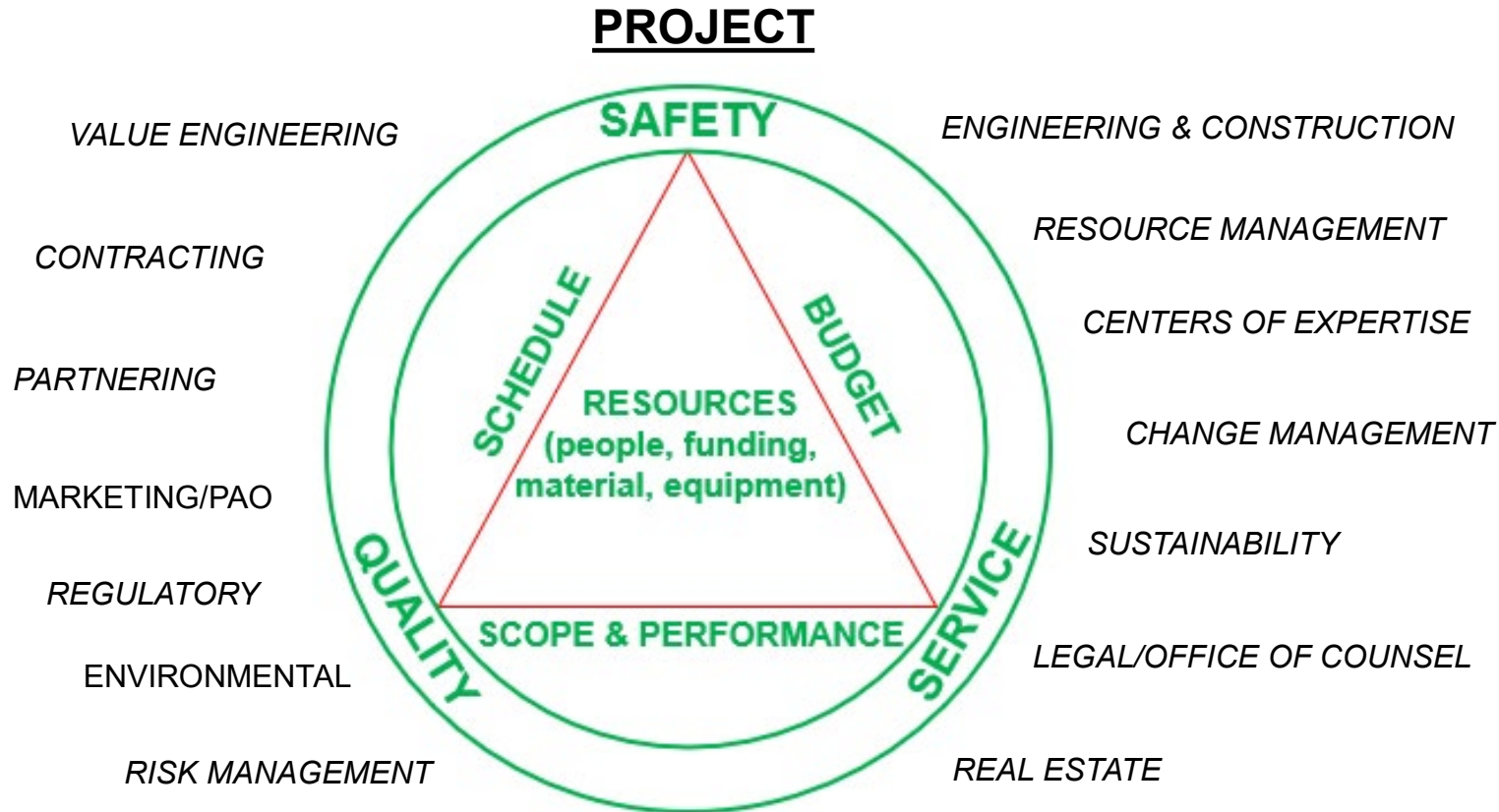


PDT responsible for project success through life cycle of project.
Teamwork is Key to success!





PROJECT DIAGRAM



Project: Scope, Schedule, Budget

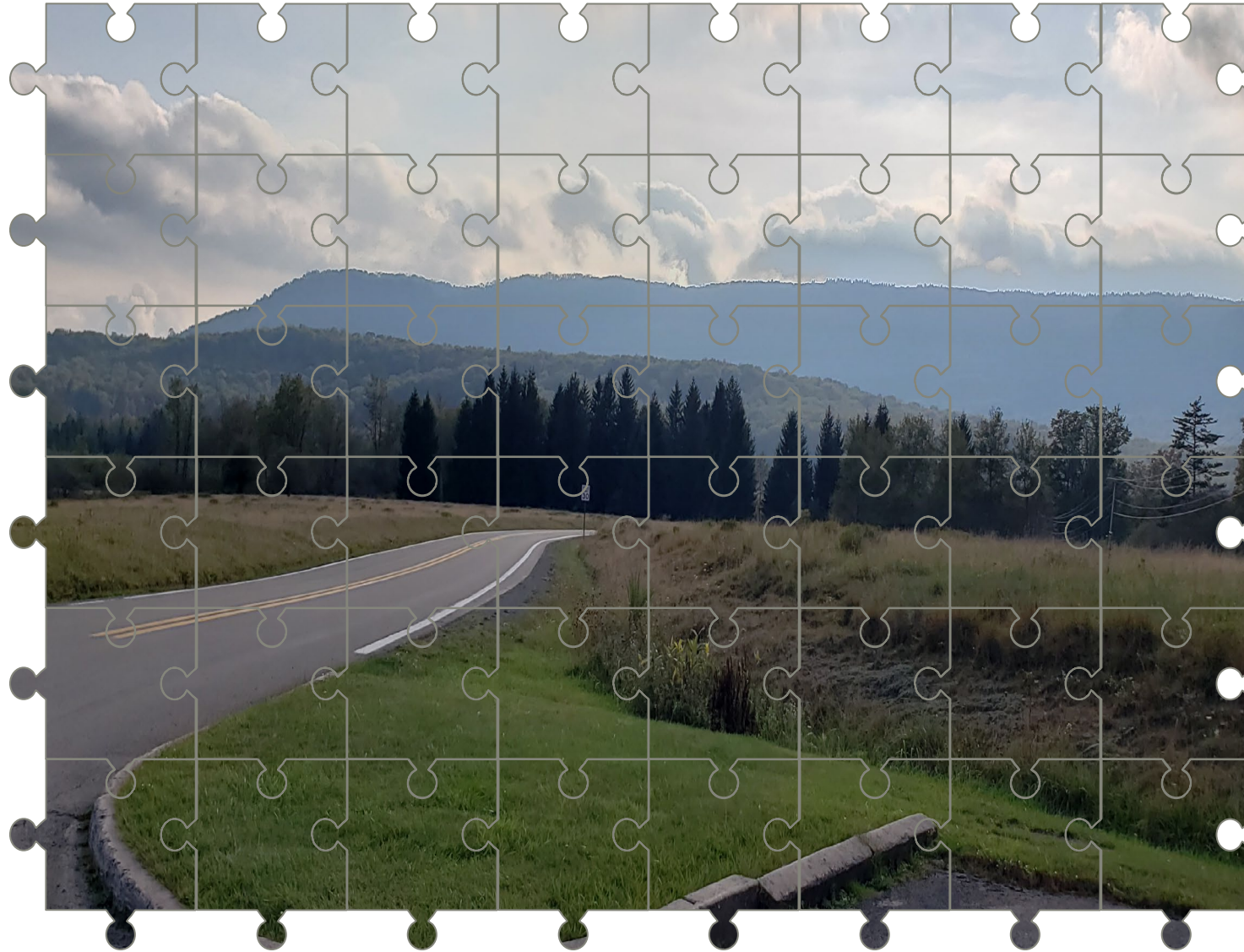
Business Culture & Values: Safety, Quality, Service

Resources: Project Delivery Team

– USACE, Contractors, Regulators & Stakeholders

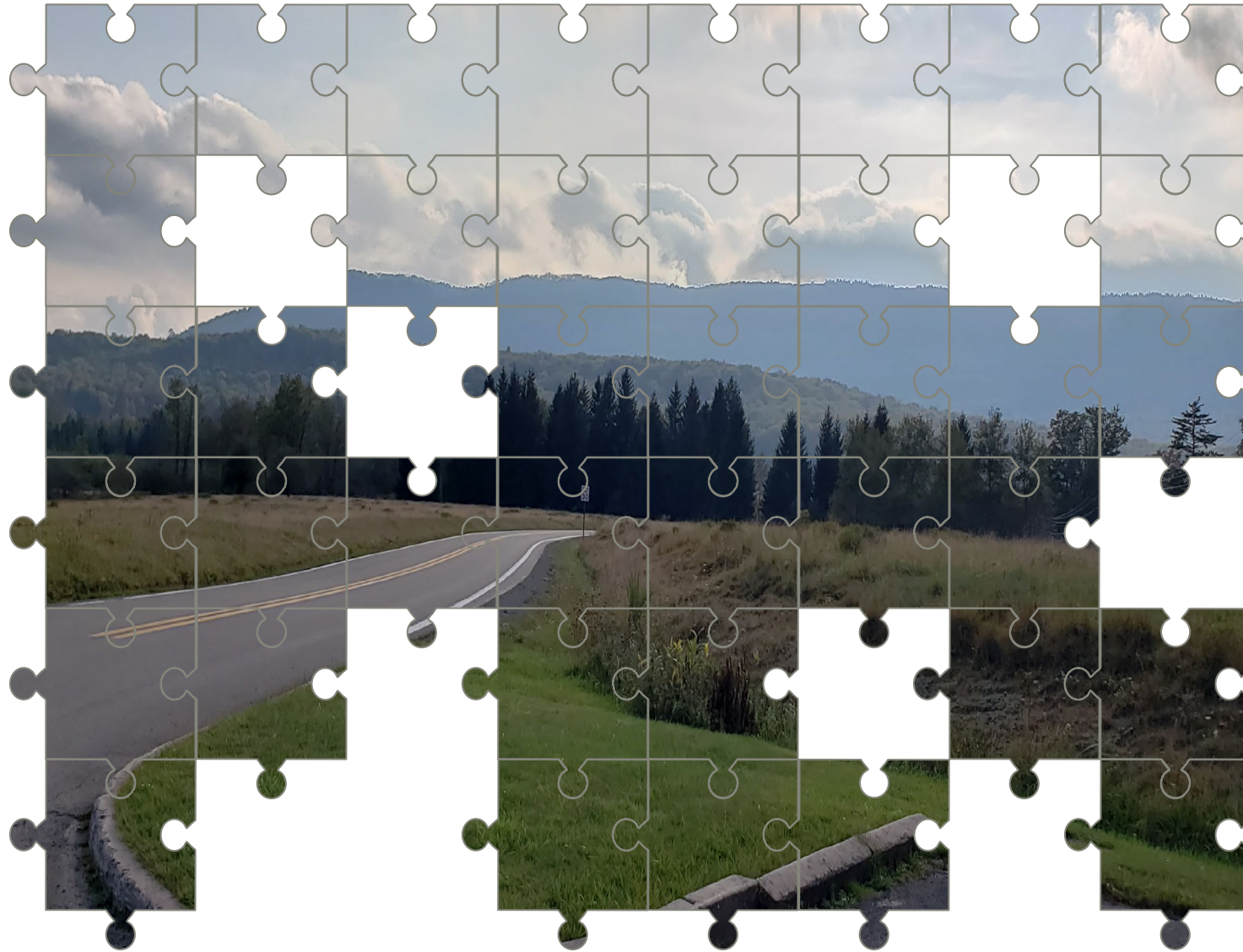


ONE PROJECT – ONE TEAM





IDENTIFYING AND PREVENTING THE GAPS

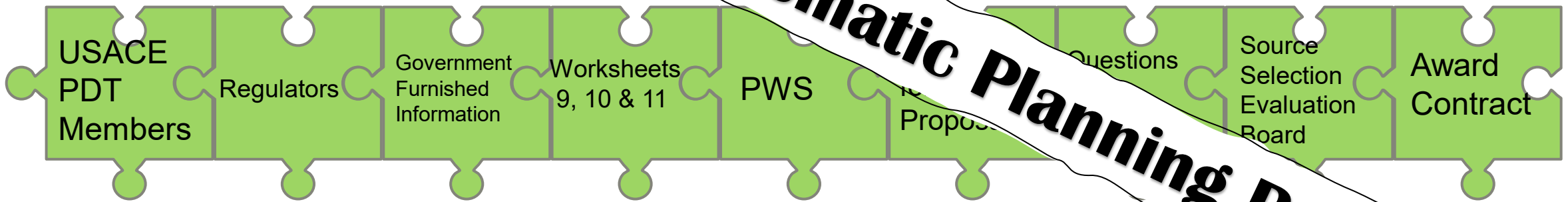




IDENTIFYING AND PREVENTING THE GAPS



It all starts with the Systematic Planning Process





THE SYSTEMATIC PLANNING PROCESS



*SPP supports decision making using a weight of evidence (WoE) approach, which is based on multiple lines of evidence in the CSM. The WoE process consists of systematically weighing and evaluating evidence (both quantitative and qualitative), leading to a conclusion that is best supported by all the information in the CSM. It considers the **relevance, strength, and reliability of all data, and promotes informed, defensible decisions on MRSs.** SPP ensures the Conceptual Site Model (CSM) is developed through a **collaborative effort between the PDT, regulators and major stakeholders.** The CSM is a key project-planning and decision-making tool and must be updated regularly as data is acquired throughout the project. EM 200-1-15 May 2022*

EM 200-1-15 provides SPP activity overview

- For each step, it provides
 - Inputs
 - Activities
 - Outputs
- Identifies participants needed





SYSTEMATIC PLANNING PROCESS SESSIONS 1 & 2



Planning Session #1 through Final MEC Remedial Action Report							
Project Phase	Remedial Design RFP-Contract Award Work Plan Preparation			Remedy Implementation		Final Reporting	
Generalized PMP Activity	Pre-Award Systematic Project Planning		Contract RFP, Evaluation & Award Contract	Project QAPP	RA Field Work		RA Report
MR-QAPP Activity	Planning Session #1	Planning Session #2	n/a	Planning Sessions 3&4	Geophysical Mapping & Data Analysis	Source Characterization	Final Data Usability Assessment
Participants:	LEAD-key; REG	LEAD-key; REG	LEAD-key; KO/OC	LEAD-key; REG; CONTR-key	LEAD-key; CONTR-key; CONTR-field; REG (for DUA and other needed tasks)	LEAD-key; CONTR-key; CONTR-field; REG (for DUA and other needed tasks)	LEAD-key; REG; CONTR-rpt.
Inputs	<ul style="list-style-type: none"> All available data from the RI, FS, ROD, ASR, etc. 	<ul style="list-style-type: none"> Planning Session #1 Outputs 	<ul style="list-style-type: none"> Planning Session #2 outputs Draft QASP 	<ul style="list-style-type: none"> Planning Session 2 outputs Contractor's Proposal 	<ul style="list-style-type: none"> Final Project QAPP Final QASP Field Data 	<ul style="list-style-type: none"> Project QAPP Geophysical Mapping & Analysis outputs Cued or One-Pass AGC data 	<ul style="list-style-type: none"> Outputs from Geophysical Mapping and Analysis, Source Characterization and Target of Interest Investigation
Activities	<p>Planning Session #1:</p> <ul style="list-style-type: none"> Define Overall Objectives <p>Other Activities:</p> <ul style="list-style-type: none"> Initiate Contract Action Initiate Right-of-Entry actions 	<p>Planning Session #2:</p> <ul style="list-style-type: none"> Site Visit Determine Data Needs Determine Intended Uses of Data <p>Other Activities:</p> <ul style="list-style-type: none"> EM CX Independent Technical Review of Draft PWS, Evaluation Criteria & Independent Government Estimate 	<ul style="list-style-type: none"> Finalize PWS Finalize Evaluation Criteria Issue RFP Site Visit Finalize Independent Government Estimate Conduct Source Selection and Evaluation Board Finalize Rights-of-Entry 	<ul style="list-style-type: none"> Site Visit Contracting Officer or COR approves Project QAPP Deliverable Worksheet 1 signed EM CX Independent Technical Review 	<ul style="list-style-type: none"> IVS Installation Equipment Assemblies Site Prep Geophysical Mapping Data Analysis & Interpretation QC Activities QA Activities (Field/Data) QA Activities (KO/COR) 	<ul style="list-style-type: none"> Anomaly Classification Intrusive Activities QC Activities QA Activities (Field/Data) QA Activities (KO/COR) 	<ul style="list-style-type: none"> Final Data Usability Assessment Draft RA Report Assemble Appendices Assemble GIS EM CX Independent Technical Review PDT Meeting(s) to discuss decisions
Outputs	<ul style="list-style-type: none"> Worksheet 10 CSM (preliminary) Worksheet 11 DQO Steps #1 & #2 Worksheet 9 updated 	<ul style="list-style-type: none"> Worksheet 11 DQO Steps #3 & #4 Worksheet 9 updated Draft PWS Draft Evaluation Criteria Draft Independent Government Estimate Draft QASP 	<ul style="list-style-type: none"> Contract award 	<ul style="list-style-type: none"> Final Project QAPP Final QASP Final QA Seed Plan(s) for High Density Area Characterization Major Milestone Complete 	<ul style="list-style-type: none"> IVS Technical Memorandum Quality management reports Data Usability Assessment Anomaly Detection Analyses Anomaly Selections Updated CSM QASP Reports Major Milestone Complete 	<ul style="list-style-type: none"> IVS Technical Memorandum Quality management reports Data Usability Assessment Classified and ranked source list Anomaly Resolution Report Major Milestone Complete 	<ul style="list-style-type: none"> Final RA Report Detailed Site Model

Note: Red text indicates an activity that includes contracting (KO or COR)



SYSTEMATIC PLANNING PROCESS PARTICIPANTS



Planning Session #1 through Final MEC Remedial Action Report							
Project Phase	Remedial Design RFP-Contract Award Work Plan Preparation			Remedy Implementation		Final Reporting	
Generalized PMP Activity	Pre-Award Systematic Project Planning		Contract RFP, Evaluation & Award Contract	Project QAPP	RA Field Work		RA Report
MR-QAPP Activity	Planning Session #1	Planning Session #2	n/a	Planning Sessions 3&4	Geophysical Mapping & Data Analysis	Source Characterization	Final Data Usability Assessment
Participants:	LEAD-key; REG	LEAD-key; REG	LEAD-key; REG; CONTR-key	LEAD-key; REG; CONTR-key	LEAD-key; CONTR-key; CONTR-field; REG (for DUA and other needed tasks)	LEAD-key; CONTR-key; CONTR-field; REG (for DUA and other needed tasks)	LEAD-key; REG; CONTR-rpt.
Inputs	<ul style="list-style-type: none"> All available data from the RI, FS, ROD, ASR, etc. 	<ul style="list-style-type: none"> Planning Session #1 Output 	<ul style="list-style-type: none"> Planning Session #2 outputs Draft QASP 	<ul style="list-style-type: none"> Planning Session 2 outputs Contractor's Proposal 	<ul style="list-style-type: none"> Final Project QAPP Final QASP Field Data 	<ul style="list-style-type: none"> Project QAPP Geophysical Mapping & Analysis outputs Cued or One-Pass AGC data 	<ul style="list-style-type: none"> Outputs from Geophysical Mapping and Analysis, Source Characterization and Target of Interest Investigation
	Planning Session #1: <ul style="list-style-type: none"> Define Overall Objectives 	Planning Session #2: <ul style="list-style-type: none"> Site Visit Determine Data Needs Determine Intended Uses of Data 	<ul style="list-style-type: none"> Finalize PWS Finalize Evaluation Criteria Issue RFP Site Visit 	<ul style="list-style-type: none"> Site Visit Contracting Officer or COR approves Project 	<ul style="list-style-type: none"> IVS Installation Equipment Assemblies Site Prep Geophysical Mapping 	<ul style="list-style-type: none"> Anomaly Classification Intrusive Activities 	<ul style="list-style-type: none"> Final Data Usability Assessment Draft RA Report Assemble Appendices

Participants

Group #	Lead Agent Key Personnel ⁽³⁾ (LEAD-key)	Contracting/Counsel (KO/OC)	Lead Regulator (REG)	Contractor Key Personnel ⁽³⁾ (CONTR-key)	Contractor Field Personnel (CONTR-field)	Contractor Report Authors (CONTR-rpt.)
Participants	<ul style="list-style-type: none"> Project Manager Contracting Officer Representative Technical Manager (if not Geophysicist) Lead Agent Geophysicist Lead Agent Chemist Lead Agent Risk Assessor Lead Agent OESS Lead Agent EM CX (optional) 	<ul style="list-style-type: none"> Lead Agent Contracting Officer Lead Agent Office of Counsel 	<ul style="list-style-type: none"> Lead Regulator Project Manager Supporting staff (as determined by the Lead Regulator PM) 	<ul style="list-style-type: none"> Contractor Project Manager Contractor Technical Manager (if not Geophysicist) Contractor Project Geophysicist Contractor QC Geophysicist Contractor Chemist Contractor Risk Assessor Contractor SUXOS 	<ul style="list-style-type: none"> Contractor Project Geophysicist Contractor QC Geophysicist Contractor Geophysicist Processor(s) Contractor Geophysicist Team Leader(s) Contractor Geophysicist Team Member(s) Contractor GIS Manager/Member(s) Contractor UXOSO Contractor UXO Team Leader(s) Contractor UXO Team Members Contractor Geodetic Survey Leader Contractor Geodetic Survey Team(s) 	<ul style="list-style-type: none"> Contractor Project Manager Contractor Technical Manager (if not Geophysicist) Contractor Project Geophysicist Contractor Project Chemist Contractor Risk Assessor Contractor MEC Operations Specialist



GENERAL RD-RA WORKFLOW AND PLANNING

Planning Session #1 through Final MEC Remedial Action Report							
Project Phase	Remedial Design RFP-Contract Award Work Plan Preparation			Remedy Implementation		Final Reporting	
Generalized PMP Activity	Pre-Award Systematic Project Planning		Contract RFP, Evaluation & Award Contract	Project QAPP	RA Field Work		RA Report
MR-QAPP Activity	Planning Session #1	Planning Session #2	n/a	Planning Sessions 3&4	Geophysical Mapping & Data Analysis	Source Characterization	Final Data Usability Assessment
Participants:	LEAD-key; REG	LEAD-key; REG	EM CX Independent; REG	LEAD-key; REG; CONTR-key	LEAD-key; CONTR-key; CONTR-field; REG (for DUA and other needed tasks)	LEAD-key; CONTR-key; CONTR-field; REG (for DUA and other needed tasks)	LEAD-key; REG; CONTR-rpt.
Inputs	<ul style="list-style-type: none"> All available data from the RLES, ROD, ASP, etc. 	<ul style="list-style-type: none"> Planning Session #1 Output 	<ul style="list-style-type: none"> Planning Session #2 outputs Draft QASP 	<ul style="list-style-type: none"> Planning Session 2 outputs Contractor's Proposal 	<ul style="list-style-type: none"> Final Project QAPP Final QASP Field Data 	<ul style="list-style-type: none"> Project QAPP Geophysical Mapping & Analysis outputs Cued or One-Pass AGC data 	<ul style="list-style-type: none"> Outputs from Geophysical Mapping and Analysis, Source Characterization and Target of Interest Investigation
Activities	<p>Planning Session #1:</p> <ul style="list-style-type: none"> Define Overall Objectives Initiate Contract Action Initiate Right-of-Entry actions <p>Other Activities:</p>	<p>Planning Session #2:</p> <ul style="list-style-type: none"> Site Visits Determine Data Needs Determine Intended Uses of Data EM CX Independent Technical Review of Draft PWS, Evaluation Criteria & Independent Government Estimate <p>Other Activities:</p>	<p>Site Visits</p> <ul style="list-style-type: none"> Finalize PWS Finalize Evaluation Criteria Issue RFI Site Visit Finalize Independent Government Estimate Conduct Source Selection and Evaluation Board Finalize rights-of-Entry 	<ul style="list-style-type: none"> Site Visit Contracting Officer or COR approves Project QAPP Deliverable Worksheet 1 signed EM CX Independent Technical Review 	<ul style="list-style-type: none"> IVS Installation Equipment Assemblies Site Prep Geophysical Mapping Data Analysis & Interpretation QC Activities QA Activities (Field/Data) QA Activities (KO/COR) 	<ul style="list-style-type: none"> Anomaly Classification Intrusive Activities QC Activities QA Activities (Field/Data) QA Activities (KO/COR) 	<ul style="list-style-type: none"> Final Data Usability Assessment Draft RA Report Assemble Appendices Assemble GIS EM CX Independent Technical Review PDT Meeting(s) to discuss decisions
Outputs	<ul style="list-style-type: none"> Worksheet 10 CSM (preliminary) Worksheet 11 DQO Steps #1 & #2 Worksheet 9 updated 	<ul style="list-style-type: none"> Worksheet 11 DQO Steps #3 & #4 Worksheet 8 updated Draft PWS Draft Evaluation Criteria Draft Independent Government Estimate Draft QASP 	<ul style="list-style-type: none"> Contract award 	<ul style="list-style-type: none"> Final Project QAPP Final QASP Final QA Seed Plan(s) for High Density Area Characterization Major Milestone Complete 	<ul style="list-style-type: none"> Quality management reports Data Usability Assessment Anomaly Detection Analyses Anomaly Selections Updated CSM QASP Reports Major Milestone Complete 	<ul style="list-style-type: none"> IVS Technical Memorandum Quality management reports Data Usability Assessment Classified and ranked source list Anomaly Resolution Report Major Milestone Complete 	<ul style="list-style-type: none"> Final RA Report Detailed Site Model

WS #10 and #11 before RFP

Site Visits

Prepare and Award Contract



WS #9, #10, AND #11: WHERE DO YOU BEGIN?



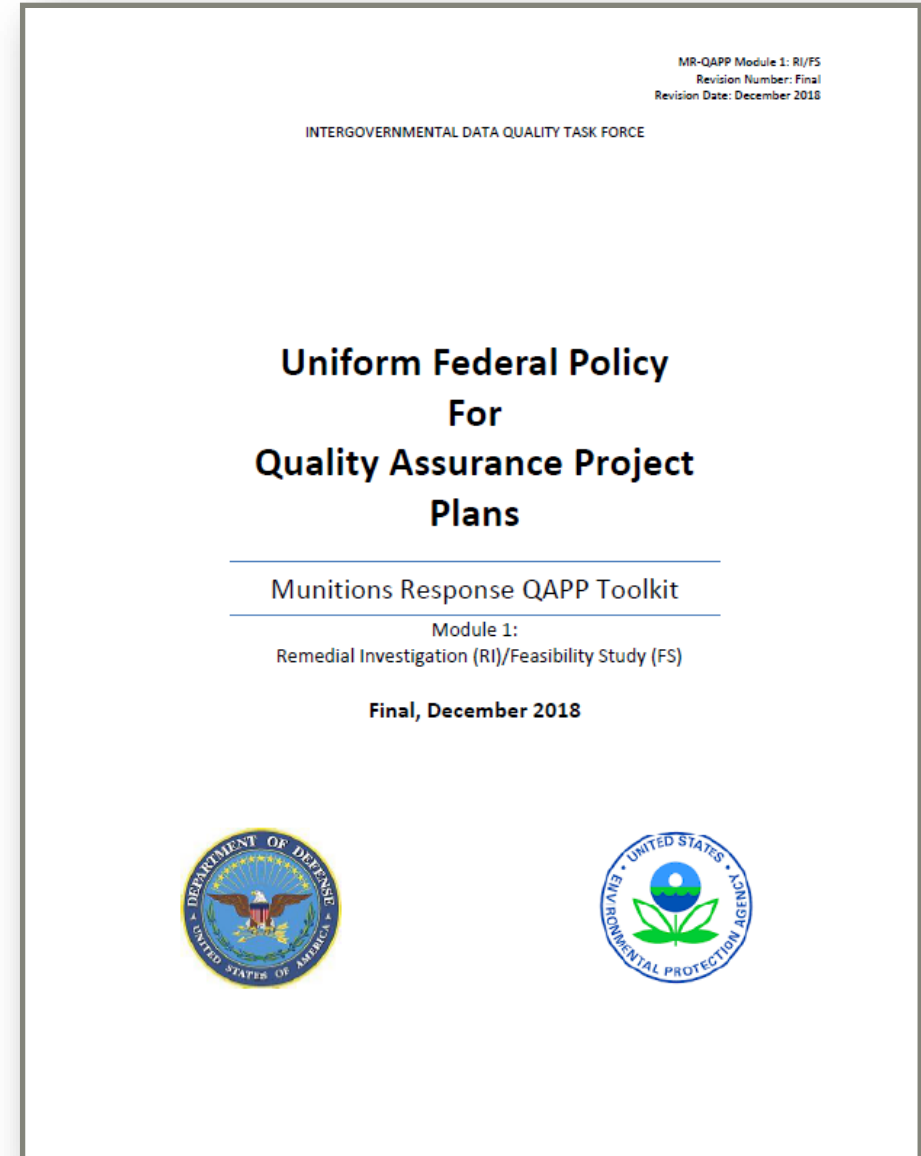
Planning tool for characterization and remediation of MEC at MRSs

- Module 1: RI/FS
- Module 2: RA

Based on Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP, IDQTF, 2005)

Provides guide for completing QAPP

- **Black text** = min. recommended requirements
- **Blue text** = examples
- **Green text** = instructions





IDENTIFYING KEY QUESTIONS



Before we start the project, it's essential to answer some key questions –

- What do we know about the site?
- What is the end result of this phase?

To answer these questions, we need to start thinking about –

- The conceptual site model (CSM) – UFP-QAPP WS #10
- The data quality objectives (DQOs) – UFP-QAPP WS #11



“If you don't know where you want to go, how will you know when you get there?”



DATA QUALITY OBJECTIVE?



DQOs let us know WHEN THE PROJECT IS DONE

Or, more specifically, when we have project data of

- *The right type(s)*
- *Sufficient quantity*
- *Adequate quality*

... to confirm CSM and demonstrate the selected remedy has been implemented
DQOs HAVE to be measurable!



Remember! If the CSM changes, DQOs may need to change



WS #11: HOW THE DQO PROCESS “FLOWS”



Step 1 – State the Problem

Step 2 – Identify the decision to be made

Step 3 – Identify the inputs to the decision

– What data do we need to answer those questions?

Step 4 – Define the study boundaries

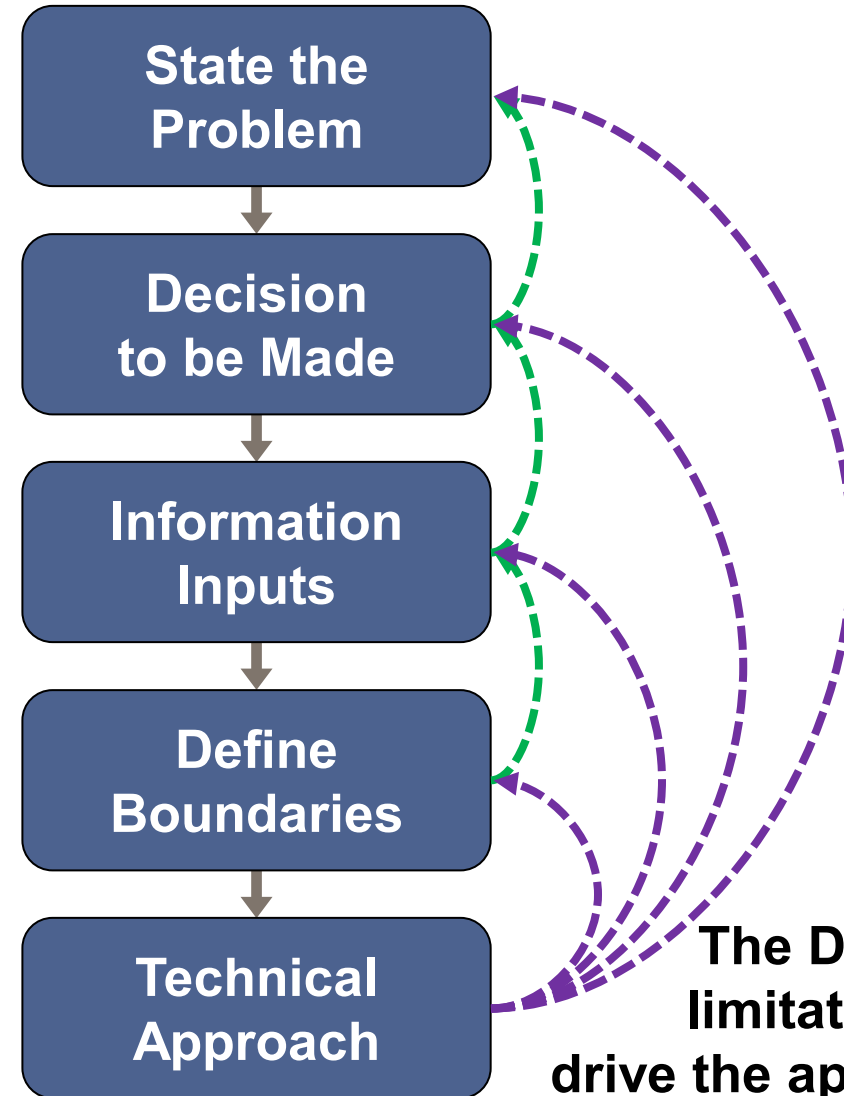
–What are the limits on data collection?

Steps 5 through 7 - Technical Approach

– How do we use the data?

– What are the standards for data usability?

– How do we collect the data?



The DATA needs and limitations WE define drive the approach we get!



WS #10: CONCEPTUAL SITE MODEL (CSM)



Current understanding of site

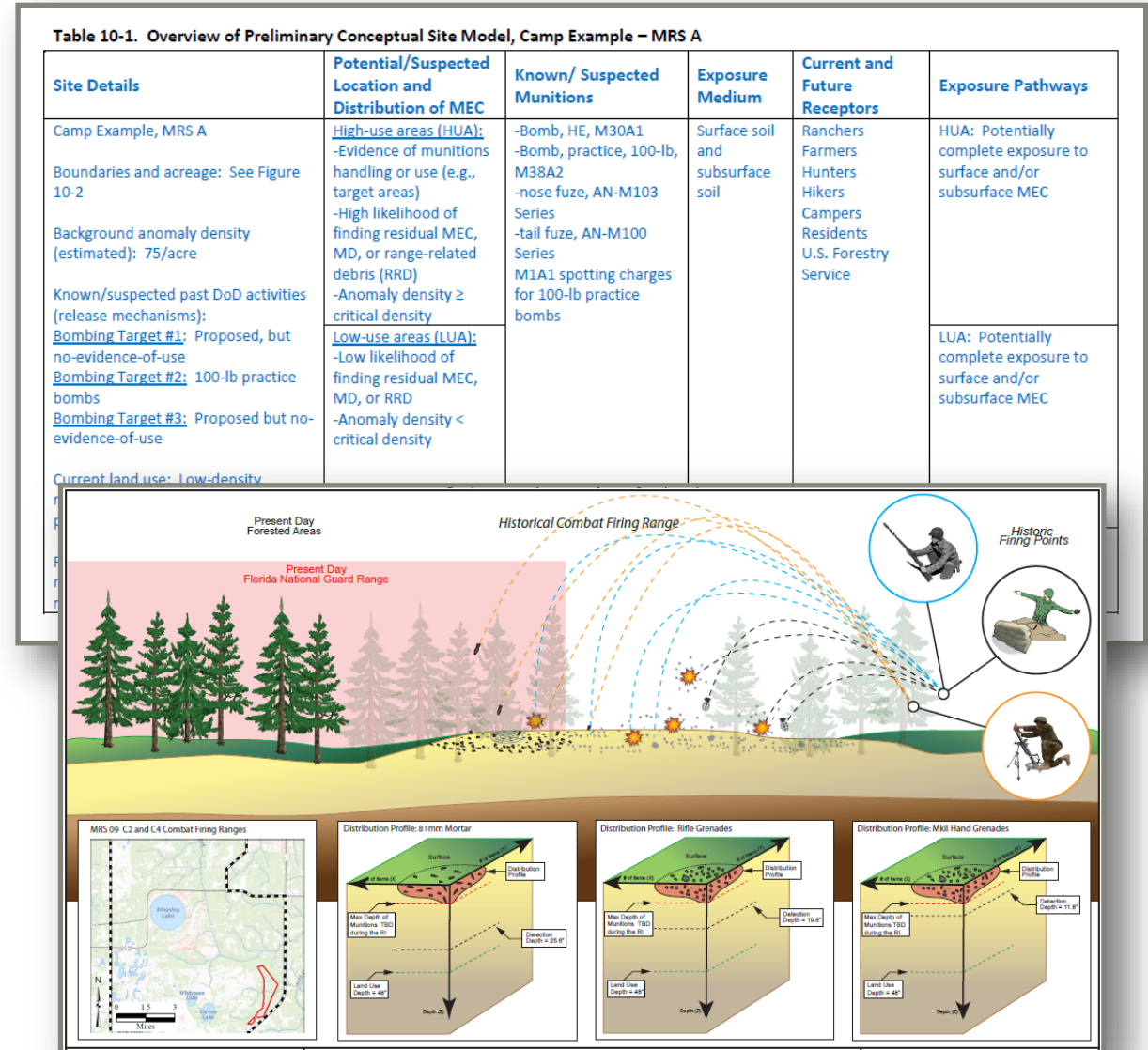
- Types of MEC/MC and areas where they are located
- Terrain considerations
- Access restrictions

Narrative description supported by:

- Tables, maps, figures, and graphics

Assists in developing investigation strategy and DQOs

Should be in good shape at the RA stage!





WS #10: CSM – ELEMENTS



Facility Profile

- Site location, size and ownership
- Identification of munitions and hazardous substances known or suspected to be present
- Concise summary of relevant findings from previous investigations
- ROE status

Physical Profile

- Accessibility
- Topography and vegetation
- Geologic and hydrogeologic setting
- Climate
- Endangered species, sensitive habitats, and cultural resources
- Areas that are or might be inaccessible to investigation

Consider how this relates to the phase



WS #10: CSM – ELEMENTS, CONT'D.



Release Profile

- Location and distribution of munitions and hazardous substances
 - *Horizontal AND vertical*
 - *Affected environmental media*
 - *Anomaly densities?*
- The areas being addressed by the selected remedy

Land Use and Exposure Profile

- Current land uses
- Neighboring land uses
- Access conditions
 - *Temporal restrictions?*
 - *Limitations on ROE?*

Consider how this relates to the phase.



WS#9: PROJECT PLANNING SESSION SUMMARY



For each planning session (*inc. pre-award*)

- Meeting purpose, dates, and locations
- Attendees, roles, and contact information
- Meeting summary
 - **Consensus decisions made**
 - **Action items**
 - **Regulator and stakeholder concerns**
 - Other notes/comments



Name	Title	Affiliation	Phone	E-mail	Project Role

Document, Document, Document !



LESSONS LEARNED



When you're buying a car, do you...

- Just ask the salesman for “a car”?
- Tell them your preferences and expectations?

Use Systematic Planning Process (SPP)

It helps us organize our thinking about the project.

Gets the government and the regulators on the same page before award.

Allows our regulators and stakeholders buy in before the award.

Assemble the RIGHT team.

Provides a consistent outline for communication!

BENEFITS: It helps outline potential roadblocks with:

- Confusion and later disagreement on the CSM
- Cultural and ecological concerns at the site
- Vegetation cutting restrictions
- Potential schedule delays
- Stakeholder issues/concerns



LESSONS LEARNED CONTINUED



Conduct SPP meetings BEFORE we finalize PWS & QAPP Worksheets 9 - 11

SPP Meetings 1 & 2 Outputs help outline the project

- What we currently know about the site
- What needs to be done
- Our key expectations for the project regarding data collection
- Stakeholder issues/concerns
- Sets up a better project for our contractors to bid and understand

Contractors aren't psychic! We can't expect them to know everything we want or need.

If we don't clearly outline Worksheets 10 & 11, it's likely we'll be disappointed by the result.



SPP DISCUSSIONS PRIOR TO SOLICITATION



Anomaly detection/classification issues

- *Anomaly density estimates*
- *Anomaly reduction (saturated areas)*
- Production rates
- *Depth of classification considerations*
- Coverage exclusions (ROD/ROE or other)

Specific technology limitations or expectations

- *Did government (ROD) say analog anywhere?*
- Does an Item of Concern (IOC) require unique approaches?

Explosives safety considerations

Biological and Cultural Resource Considerations

- Pre-solicitation, determine biological and cultural resource needs
- Include in planning and in PWS

Draft Quality Assurance Surveillance Plan (QASP)

- Required for service contracts
- Alerts contractor who is doing what and when
 - Should really reference project QAPP in many places



MILITARY MUNITIONS RESPONSE PROGRAM POLICY



DERP Manual States:

- **Administrative Record (AR) must include:**

- Data gathered to characterize a munitions response site (MRS) (including geophysical sensor data that is digitally recorded and geo-referenced) accompanied by a clear audit trail of pertinent analyses and resulting decisions.

- **When analog is used:**

- “Where collecting digitally recorded, geo-referenced, geophysical sensor data is impractical or unwarranted, the installation shall forward a memorandum documenting the determination to the DoD Component Secretariat; the memorandum shall be included in the administrative record and the information repository.”

DoDM 4715.20

AGC Implementation at FUDS MMRP Projects (aka the Karen Baker memo)

AGC is the standard:

- ¶5a: AGC is the preferred method for geophysical data collection in FUDS munitions response activities during the investigative and clean up phases
- 5b: Non-AGC digital geophysical mapping (DGM) can be used for detection when followed by AGC

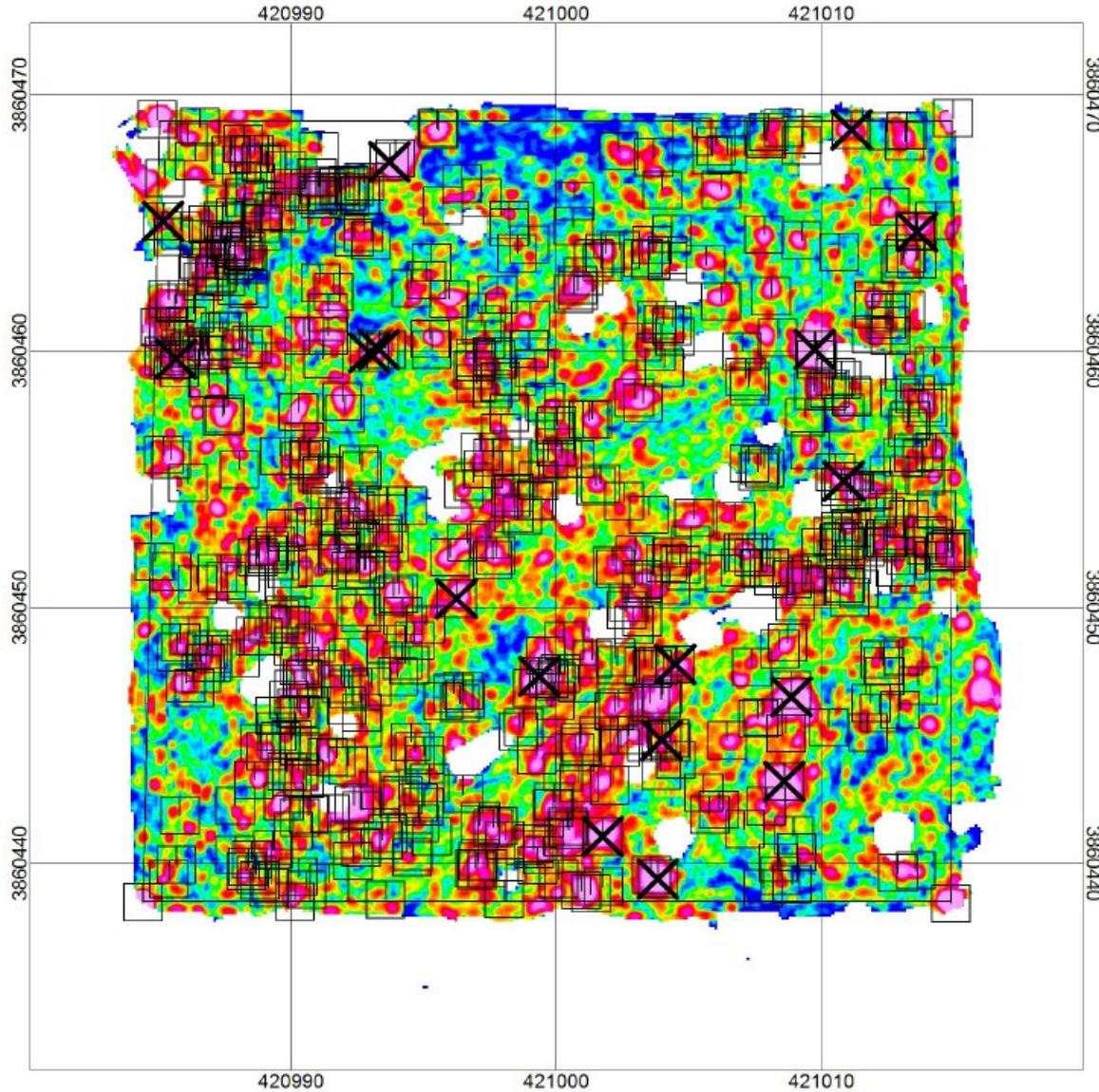
If analog is used:

- ¶5i: “For site-specific cases where the PDT determines use of AGC is not feasible or practical within a given MRS, the specific reasons shall be clearly documented in the administrative record for the MMRP project.”

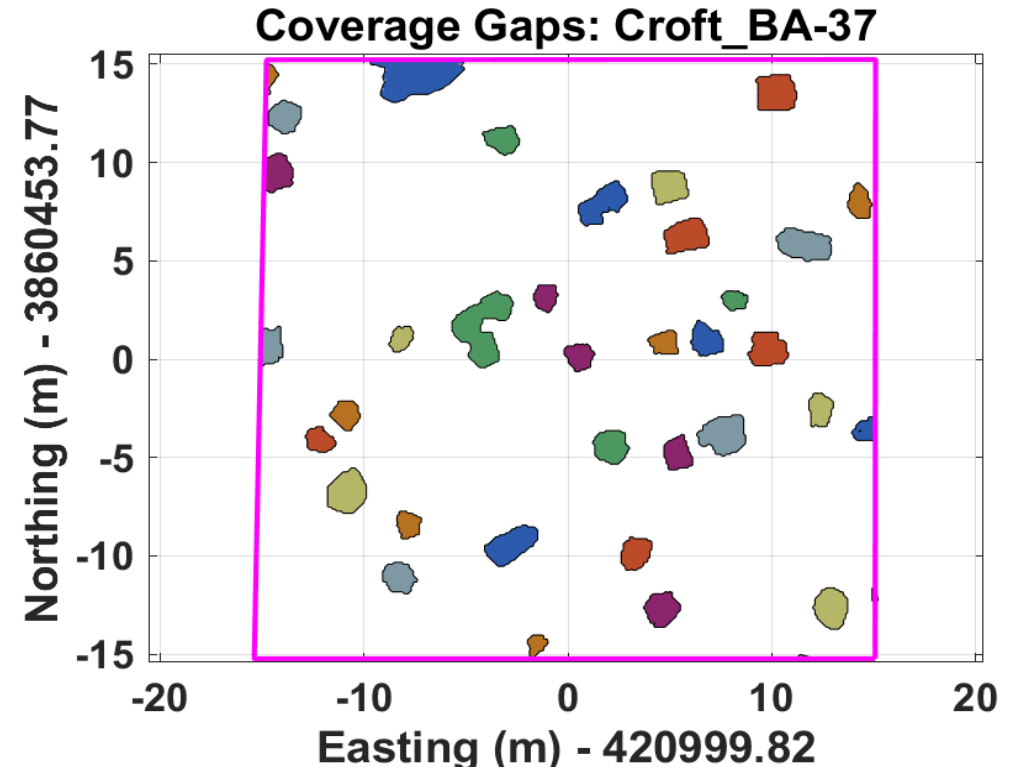
FUDS Guidance on Implementation of AGC Technology at MMRP Projects, 24 April 2017



ANOMALY DENSITY AND SURVEY COVERAGE



Detections- 609
TOI- 17
Coverage- 92%





ANOMALY REDUCTION (SATURATED AREAS)

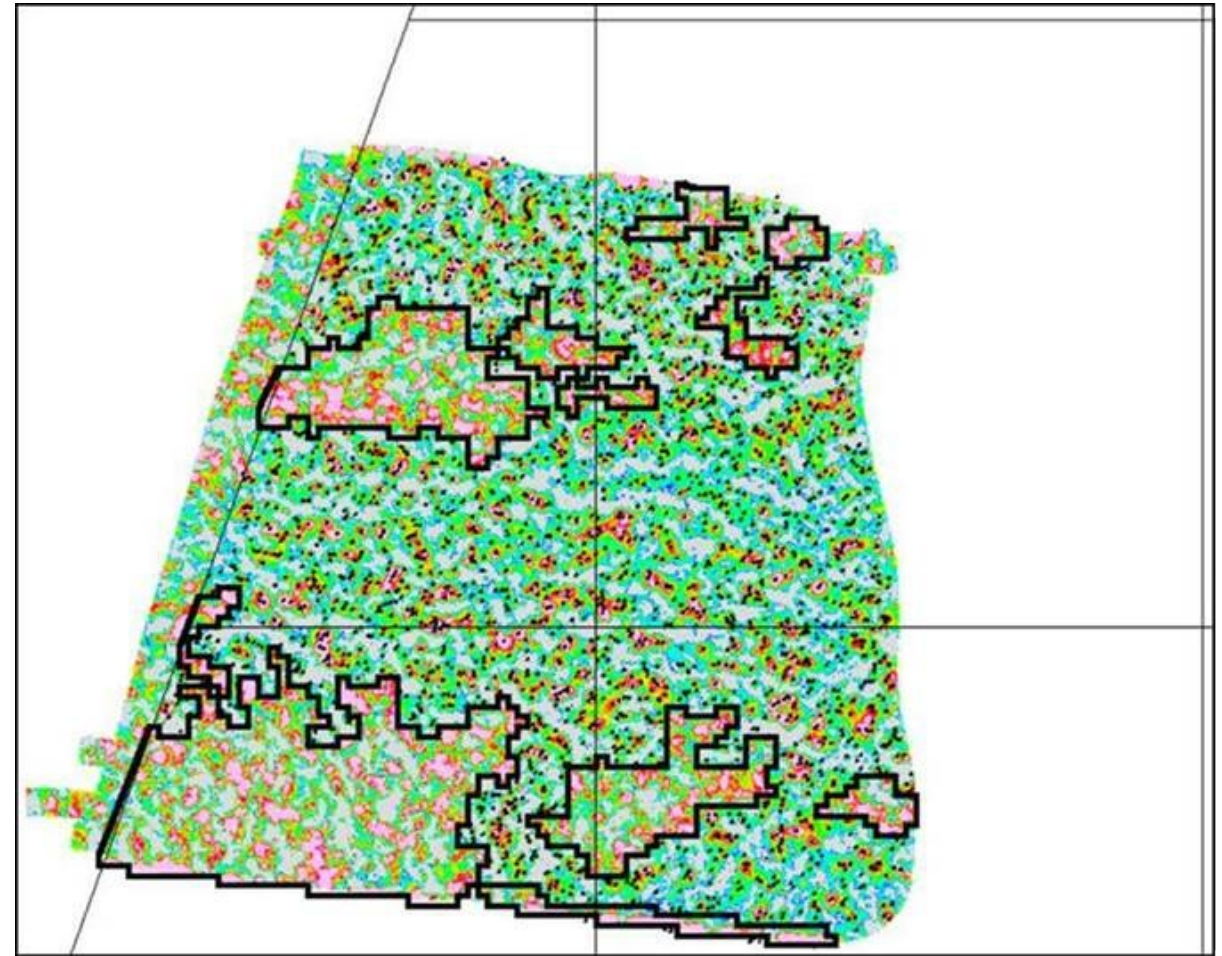


Saturated response areas (SRAs)

- Areas where geophysical methods cannot discern individual sources

Two primary methods for anomaly reduction:

- Analog methods
 - Searching for, excavating, and documenting each detectable source using mag and dig THEN following with dynamic AGC
- Dig and sift methods
 - Identifying and documenting each recovered source using dig and sift, THEN following with dynamic AGC





DEPTH OF CLASSIFICATION CONSIDERATIONS

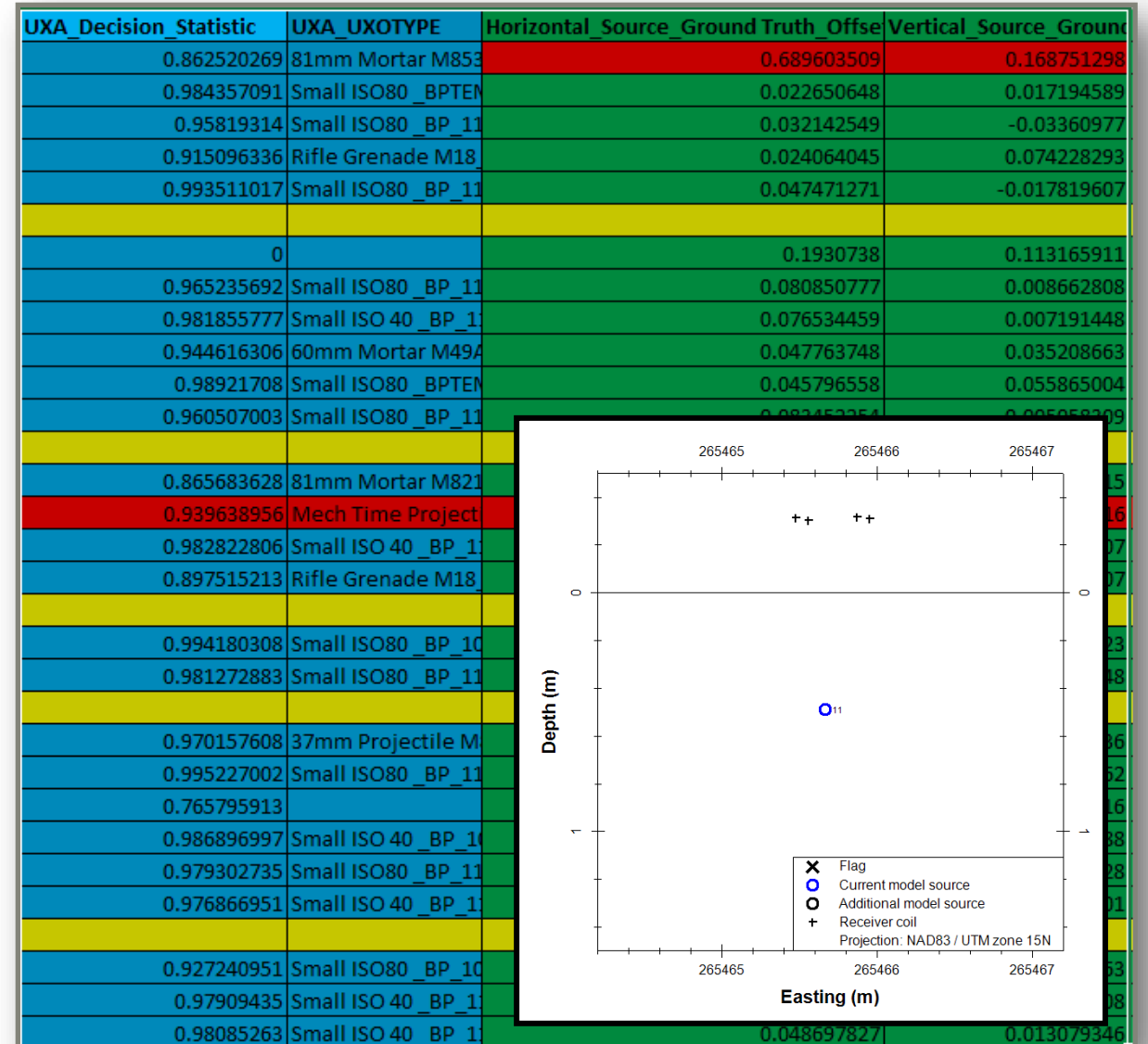


Depth of detection

- What are the depths for all Item of Concerns (IOCs)?

Removal to X depth

- Does ROD explicitly state MEC are remaining deeper?
 - Good news – stop digging at X!
- What about classification errors?
 - Such as
 - Resolution
 - Center of mass -vs- subsurface plane
 - Account for errors and variability
- What about Target of Interests that are classified deeper than X?
 - Digging them is the default
 - There may be exceptions





ISSUES WITH ANALOG

Using digital geophysical instruments

- Long-standing DoD policy preference is to use digital geophysical technologies for MMRP response
- DoD-EPA MOU (March 2000) requires digitally recorded and georeferenced data to maximum practicable extent

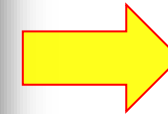
Using AGC instruments

- HQ USACE has determined
 - “AGC is the preferred method for geophysical data collection in FUDS munitions response activities...”
 - PDTs “shall consider the use of AGC as the standard for digital geophysical data collection...”

Additionally, new positioning technology (SLAM) allows use of digital sensors in many more locations



Use of analog geophysical methods for supporting project decisions MUST be justified and approved





WHEN IS IT OKAY TO USE ANALOG?



Analog methods are only supposed to be used when no digital (DGM/AGC) sensor can be used, or when NOT being used to *make decisions*

– Examples of use:

- Anomaly avoidance
- Instrument-assisted anomaly reduction or surface sweep prior to DGM/AGC mapping
- Mag and dig in SRAs to reduce no. of anomalies prior to DGM/AGC mapping
- Investigation of TOIs identified using DGM/AGC
- Limited fill-in along point-to-point sampling gap
- **When the ROD says it's okay**
 - **This is a “new” expectation; analog must be explicitly stated**



Wetland area with vegetation restrictions- Cannot get a digital tool to the ground surface



Terrain- not a problem!



STILL MORE LESSONS LEARNED



Ensure PWS & QAPP WS#9-#11 deal with Selected Remedy implementation

- Use the ROD

Conduct pre-proposal site visits

- Pre-RFP and pre-award

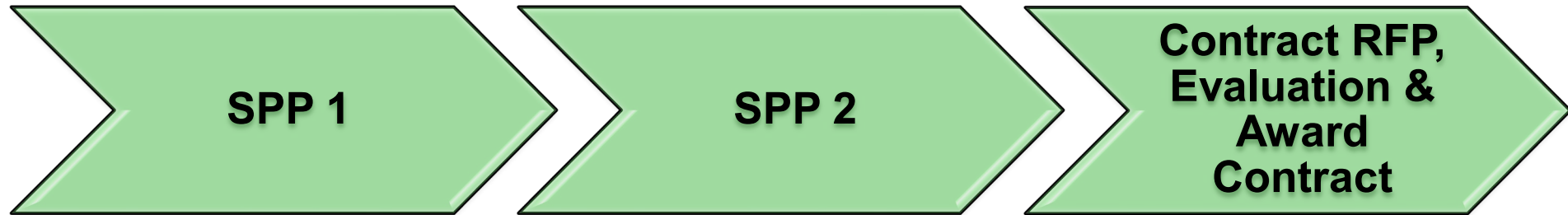
Discuss and document the issues

- Anomaly density estimates and SRAs
- Depth of classification considerations
- Access limitations
- Coverage exclusions
- Specific technology expectations
- Explosives safety considerations
- Biological and Cultural Resources
- Draft QASP

Don't kick the can! You'll regret it!



SPP 1 & 2 FEEDS INTO THE RFP & EVALUATION



- Worksheet 10 CSM (preliminary)
- Worksheet 11 DQO Steps #1 & #2
- Worksheet 9 updated

- Worksheet 11 DQO Steps #3 & #4
- Worksheet 9 updated
- Draft PWS
- Draft Evaluation Criteria
- Draft Independent Government Estimate
- Draft QASP



IT'S A PACKAGE DEAL



<p>1.0 OBJECTIVE: The overall objective of this task order is to ensure that all acceptance, compensation, regulatory, and munition-related activities must be achieved or 'Neutral Confidence' CLINs will be evaluated for fairness, reasonableness, and technical approach used to perform the work will accurately and the proposal shown included in the phase of the work. The Contractor will be developing their technical approach of contents and Government will be detailed basis of to be in sufficient.</p> <p>2.0 BACKGROUND</p> <p>2.1 Work (MMRP) The Contractor shall perform full compliance via not</p> <p>2.2 Assessment via not</p> <p>3.0 included achieve the life of effort of government</p> <p>3.0.2 Qualification task order, DDIs, and met. This program per Task or submit than satisfaction</p> <p>3.0.3 Performance Requirements. Performance Requirements Summary</p>	<p>Individual</p> <p>RFP No.</p> <p>Evaluator's Name:</p> <p>Evaluation Factor:</p> <p>Factor Rating: (Place X in Column)</p> <p>Rating Factor</p> <p>The Offer Strength</p> <p>1.) RF Pro Eva</p> <p>Weakness:</p> <p>1.) RF Proposal: Evaluation:</p> <p>Deficiencies:</p> <p>1.) RFP FACTOR: Proposal: Evaluation:</p> <p>Uncertainties:</p> <p>1.) RFP FACTOR: Proposal: Evaluation:</p>	<p>Section C - Descriptions and Specifications</p> <p>PERFORMANCE WORK STATEMENT</p> <p>CHEMICAL, ENVIRONMENTAL, MULTIPLE AWARDS CONTRACT AT SITE</p> <p>1.0 OBJECTIVE.</p> <p>1.1 The objective of this Chemical (Chem-RU) Multiple Award Task Order Contractor to perform Military Munitions conventional munitions and chemical</p> <p>1.2 Alabama, Florida, and Delaware</p> <p>1.3 The Contractor shall safely manage; and make final disposition (MEC), CWM and Hazardous, formerly used defense sites, previously federally controlled/owned sites planning; assessments; inspection prioritization; cost analyses; remediation evaluation of risks and hazards and filtration; recovery; storage; investigation derived waste (IDW) monitoring; data management; and security support. In addition construction support, and range innovative technology where feasible</p> <p>1.4 Specific services and task order herein provides a general understanding. Task Orders will contain the specific</p> <p>2.0 GENERAL.</p> <p>2.1 The Contractor shall perform</p>	<p>Government Funding Information</p>	<p>MR-QAPP Module 1: RI/F5 Revision Number: Final Revision Date: December 2018</p> <p>INTERGOVERNMENTAL DATA QUALITY TASK FORCE</p> <p>Uniform Federal Policy For Quality Assurance Project Plans</p> <p>Munitions Response QAPP Toolkit</p> <p>Worksheets 9, 10 and 11</p> <p>UNITED STATES OF AMERICA</p> <p>ENVIRONMENTAL PROTECTION AGENCY</p>
---	--	--	--	--



THE REQUEST FOR PROPOSAL (RFP)



Technical Proposals: Technical Proposals shall be provided with sufficient detail and supporting data to permit appropriate review and analysis of the Contractor's stated technical approach including a detailed breakdown of the labor mix for each specific task. Failure to provide detailed documentation may preclude your proposal from further consideration. The Contractor shall submit a project schedule which demonstrates the ability to perform all task requirements within project timelines.

Price Proposal Structure: Your price proposal shall be provided in Excel format, unlocked and with all formulas intact by utilizing the enclosed pricing structure. All CLINs/Tasks are to be priced as shown on the Price Spreadsheet enclosed for incorporation into the award. For Government price analysis and evaluation purposes, a detailed breakdown of Subcontractor prices is required at any dollar threshold in a competitive/fair opportunity environment. Lump sum pricing shall not be provided. Please round all of your prices to the nearest whole dollar.

Wage Determination: The contractor is required to comply with the Department of Labor Service Contract Act Wage Determination for this effort as follows below. Increases to your wage rates as a result of this wage determination shall be in accordance with Federal Acquisition Regulations (FAR) 52.222-41 and 52.222-43. The current prevailing SCA Wage Determination for this site location is: 2015-5489, Revision 13, dated April 7, 2021.

Evaluation Factors: Selection Criteria: Best Value, Trade-Off Analysis. Proposal Evaluation Factors and Weighting breakdown for this solicitation are as follows:

Evaluation Factors	Weight
Technical Approach	Most Important
Price	Less than Technical, but more than Past Performance
Past Performance	Least Important

* All non-price factors, when combined, are significantly more important than price.



BEST VALUE – TRADEOFF VS LPTA



The Best Value Continuum is defined in the DOD Source Selection Procedures and FAR 15.101

“Tradeoff Source Selection Process (see FAR 15.101-1). This process allows for a tradeoff between non-cost factors and cost/price and allows the Government to accept other than the lowest priced proposal or other than the highest technically rated proposal to achieve a best-value contract award.”

“Lowest Price Technically Acceptable (LPTA) Source Selection Process (see FAR 15.101-2). The LPTA process is appropriate when best value is expected to result from selection of a technically acceptable proposal with the lowest evaluated price.”



DEFINING TECHNICAL AND RISK



The technical rating reflects the degree to which the proposed approach meets or does not meet the minimum performance or capability requirements through an assessment of the strengths, weaknesses, deficiencies, and risks of a proposal.

The purpose of the technical factor(s) is to assess the offeror's proposed approach, as detailed in its proposal, to satisfy the Government's requirements. There are many aspects which may affect an offeror's ability to meet the solicitation requirements. Examples include technical approach, risk, management approach, personnel qualifications, facilities, and others. The evaluation of risk is related to the technical assessment.

Technical Risk Rating. Assessment of technical risk, which is manifested by the identification of weakness(es), considers potential for disruption of schedule, increased costs, degradation of performance, the need for increased Government oversight, or the likelihood of unsuccessful contract performance.



THE REQUEST FOR PROPOSAL, CONT'D.



Evaluation Ratings: To receive consideration for award, a rating of no less than 'Acceptable' must be achieved for Technical Approach and a rating of no less than 'Satisfactory Confidence' or 'Neutral Confidence' must be achieved for Past Performance. The proposed price of FFP CLINs will be evaluated for fairness and reasonableness, and the CPFF CLIN will be evaluated for fairness, reasonableness and realism.

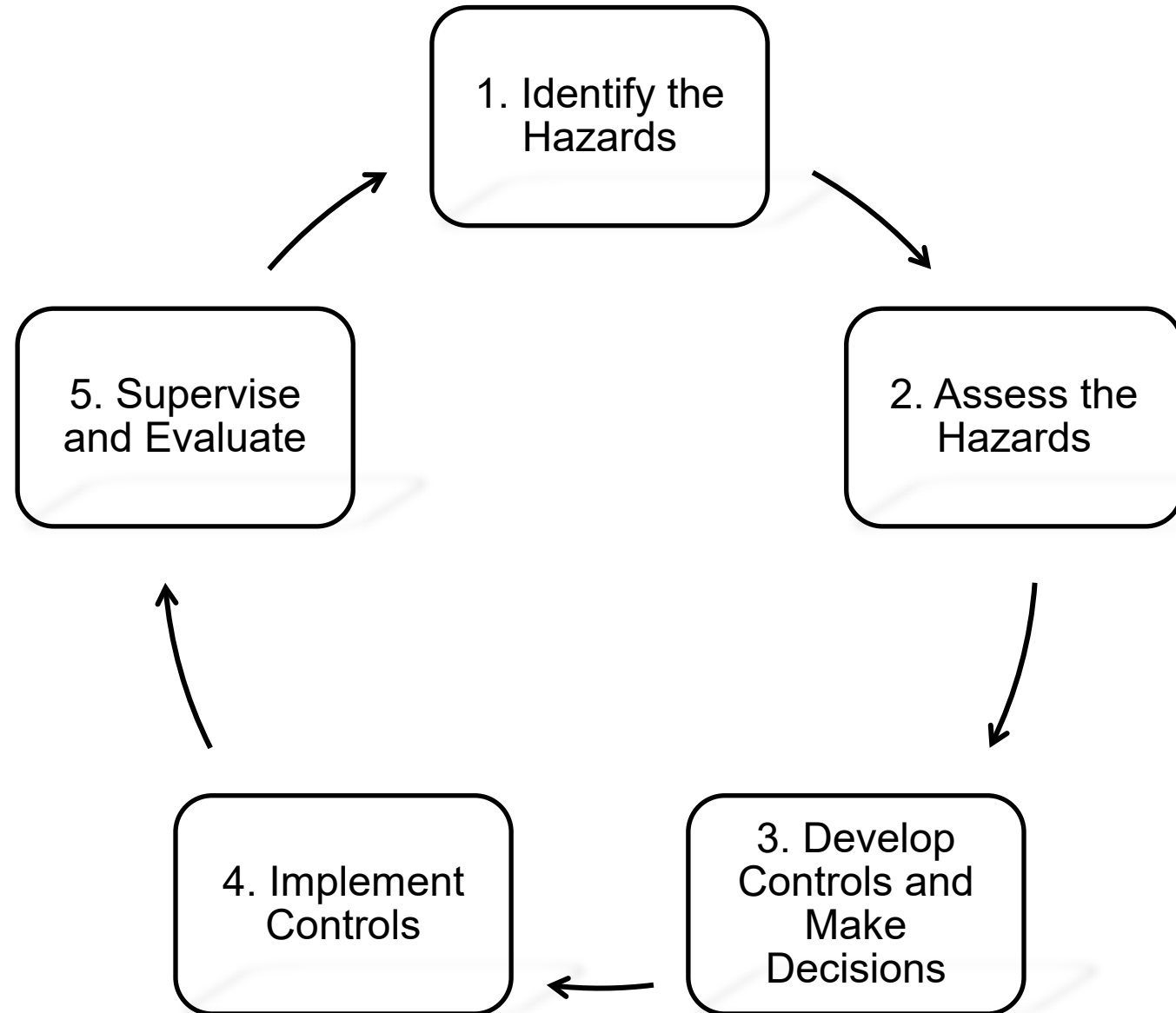
Technical Approach: The technical proposal shall address the technical requirements of the enclosed PWS. The Contractor shall submit a proposal describing the technical approach to be used to accomplish the project activities required. The technical proposal should be detailed, concise, and should cover how the Contractor will meet the objectives of the PWS, who will be performing the work, and what equipment and supplies will be required. Particular attention should be paid to how the Contractor will assure the Government that the work being performed will accurately and effectively achieve the objectives of the PWS.

The proposal should describe how the quality of the work will be assured and how it will be presented in the report. The proposal should take the reviewer step by step through each phase of the work, explaining each step, in detail.

The Contractor shall identify the risks associated with, and contingencies for, the proposed technical approach. The Contractor should also discuss any and all assumptions made when developing their technical approach. All assumptions shall be listed immediately after the table of contents and cite the page and paragraph to which each assumption refers. Please note the Government will look unfavorably upon any assumption that qualifies a Contractor's proposal. A detailed basis of estimate shall be provided in both the technical and price volumes and needs to be in sufficient detail to support the proposal submission.



RISK MANAGEMENT PROCESS





LESSONS LEARNED - AWARD



OUTPUTS from SPPs 1 & 2 are crucial to develop the PWS and set up the project for success.

NEED Worksheets 9-11 before award.

NEED critical issues identified before award to ensure contractors can include in their proposal, decrease assumptions and develop a robust schedule.

The better the communication to develop Worksheets 10 & 11, the better the PWS is outlined.

The better the PWS and WS 9 from SPP 1 & 2, the better the Final UFP-QAPP.

The better the UFP-QAPP, the better the field work.

The better the field work, the better data and analysis.

WHICH RESULTS IS A HAPPY TEAM.

