U.S. Army Environmental Center Performance-Based Contracting Guidebook



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List of Acronyms

AAR After Action Report

AEDB-CC Army Environmental Database – Compliance Cleanup

AEDB-R Army Environmental Database – Restoration

APG DOC Aberdeen Proving Ground Directorate of Contracting ASCIM Army Chief of Staff for Installation Management

CD Compact Disc

CER Candidate Evaluation Report

CLIN Contract Line Items

COR Contracting Officer's Representative

CTC Cost to Complete

El Environmental Insurance

ER, A Environmental Restoration, Army ERM Environmental Restoration Manager

FFP Firm Fixed Price

FPI Fixed Price with Incentives

GFPR Guaranteed Fixed Price Remediation
GIS Geographic Information Systems
GSA General Services Administration

IAP Installation Action Plan

ID/IQ Indefinite Delivery/Indefinite Quantity IGE Independent Government Estimate

KO Contracting Officer

MARC Multiple Award Remediation Contract

MCACES Micro Computer-Aided Cost Engineering System

MCUA Monte Carlo Uncertainty Analysis

PBC Performance-Based Contract / Performance-Based Contracting

PM Project Manager

PMP Project Management Plan
PWS Performance Work Statement

Q&A Question and Answer

QASP Quality Assurance and Surveillance Plan

RACER Remedial Actions Cost Engineering and Requirements

RC Response Complete RFP Request for Proposal

RI/FS Remedial Investigation/Feasibility Study

RIP Remedy in Place

RMAC Robert Morris Acquisition Center

ROD Record of Decision

RPM Restoration Program Manager
TEB Technical Evaluation Board
TPE Technical Project Engineer
TPIF Target Price Incentive Fee
USACE U.S. Army Corps of Engineers
USAEC U.S. Army Environmental Center

1.0 Introduction

1.1 Performance-Based Contracting Background

In the past ten years, Congressional and Executive Branch actions have been taken to reform the laws and policies that govern federal acquisition. Among the most important of these reforms are the Government Performance and Results Act of 1993, the Federal Acquisition Streamlining Act of 1994, and the Clinger-Cohen Act of 1996. All of these laws sent an important message about performance in federal programs and acquisitions, and emphasized the need to maximize the focus of contracting on results instead of on the process. As a result, Performance-Based Contracting (PBC) initiatives were developed at many Federal agencies to meet the requirements of these reforms.

PBC is a contracting approach in which contractor performance is judged against the desired outcome rather than the level of effort performed (generally referred to as cost plus fixed fee or time and materials contracts). The Army PBC program is designed to:

- Ensure that contractors are provided flexibility to determine and implement the best approach to meet the Government's performance objectives;
- Ensure that appropriate performance quality levels are achieved; and
- Guarantee that payments are made to contractors only for services that meet the agreed upon levels of quality and performance, and are delivered on the agreed upon schedule.

Why Use PBC?

Performance-Based Contracting is intended to improve cost and schedule performance without compromising cleanups that are protective of human health and the environment. PBC can:

- √ Lower risk of cost growth
- Accelerate cleanup and property transfer
- Reduce contract reporting and oversight
- √ Be aligned to exit strategies or used to optimize systems
- √ Lower remediation costs

All aspects of an acquisition are structured around the purpose of the work to be performed. The contract requirements are set forth in specific and objective terms with measurable outcomes as opposed to the manner by which the work is to be performed or through broad and imprecise statements of work.

The PBC approach is also used in the environmental contracting arena to promote innovative cleanup technologies and strategies that expedite completion of the environmental cleanup obligations while reducing the funding uncertainties and lowering overall liability. Through PBC, private remediation firms are afforded the flexibility to conduct environmental cleanups in a manner that is cost effective while ensuring that the agreed upon milestones are achieved. PBC provides financial incentives for cleanup contractors to develop and implement an expedited and efficient approach to achieve environmental remediation goals. PBC also provides contractors flexibility in exercising approaches that are more cost effective to both the contractor and the Government; a contract guarantee (when required) limits the risk that the Government may face through change orders and cost overruns when unknown conditions are encountered during remediation.

1.2 Why Change the Army's Contracting Strategy?

The Army has found that awarding performance-based contracts for remediation services is a very effective means of accomplishing work. With PBC, there is a clear understanding of the schedule and cost of work being performed and the objectives to be achieved. This understanding benefits all involved, including both the Army and its contractors. By providing clear definitions of performance expectations and evaluation criteria, there is a better likelihood that expectations will be reached to all parties' satisfaction. For the installations, the benefit is seen in reduced time spent developing work scopes for new funding, requesting funding for specific projects, and working with and/or overseeing multiple contractors. The role of the installation manager changes from contract manager to task overseer and facilitator between the contractor, regulators, and stakeholders. For Headquarters, the benefits are derived from the fixed schedule and cost associated with each contract. Fixed costs ensure future cost avoidance, freeing up funds for other projects and allowing them to move forward, sometimes ahead of schedule. Headquarters also benefits from a better understanding of financial liabilities, providing increased accountability.

1.3 Army Performance Based Contracting Program

Senior Army leadership, through its April 2003 Cleanup Strategy and Strategic Plan, identified PBC as a preferred business strategy that incorporates the use of proven commercial sector practices and incentives in the environmental cleanup process. The belief is that the use of PBC for cleanup will significantly improve overall project performance and get the program to completion. Specific information about the progress of the Army PBC Program is available online at http://aec.army.mil/usaec/cleanup/pbc00.html

The PBC program for active Army installations was initiated in FY03 by the Army Chief of Staff for Installation Management (ACSIM). The ACSIM tasked the U.S. Army Environmental Center (USAEC) with the technical implementation of the PBC program. Within the Army's framework of PBC implementation, performance-based contracts exhibit the following characteristics¹:

- Use fixed-price contracts;
- Define performance objectives, milestones, and standards;
- Use incentives or insurance to enhance performance; and
- Provide flexibility and ensure accountability for results.

General PBC Characteristics

- √ Contract for "What," not "How"
- Clearly define objectives, milestones, and standards
- Use incentives or environmental insurance to enhance performance (incentives are inherent in PBCs)
- Promote flexibility and ensure accountability
- √ Use fixed price contracts

There are several types of PBCs currently being used by the Army, including:

- Firm Fixed Price (FFP)
- Guaranteed Fixed Price Remediation (GFPR)
- Fixed Price with Incentives (FPI)
- Target Price Incentive Fee (TPIF)

¹ Source: ACSIM Memorandum, 22 Jul 04, subject: Performance-Based Remediation Contracting at Army Active Sites

The following framework for implementing the PBC program is illustrated in Attachment 1.1:

- 1) Initial Planning
- 2) On-Site Evaluation
- 3) Performance Work Statement / Request for Proposal Development
- 4) Document Preparation
- 5) Quality Assurance and Surveillance Plan Development
- 6) Independent Government Estimate Development
- 7) Offeror's Site Visit
- 8) Proposal Preparation
- 9) Preparation for Proposal Evaluation
- 10) Proposal Evaluation / Alternatives Analysis
- 11) Contract Award

The specific type of PBC utilized for a particular contract is based on the characteristics of the sites included in the PBC (i.e., contaminants and media, phase of remediation, uncertainty).

In some cases, environmental insurance (EI) is purchased to cover potential cost overruns or unexpected conditions. Regardless of whether EI is used, the basic framework for implementation is the same.

The purpose of this document is to provide guidance to Army personnel for implementing the Army's Performance-Based Contracting Program. The framework was developed in FY03 and has evolved to its present configuration through an annual update to reflect suggested improvements and lessons learned from previous years. In order to achieve the PBC goals set by Army leadership and ensure continuous improvement, ongoing process adjustments are made to ensure that all opportunities to streamline the evaluation and contracting processes are taken.

The following sections describe the activities, outline participants' roles and responsibilities, identify key issues and challenges, and provide document templates for each step in the process. <u>Attachment 1.2</u> illustrates how the steps fit together in the overall framework; <u>Attachment 1.3</u> is a generic schedule depicting a typical timeline for the steps. Although the timeline will vary according to the installation, scope of the effort, contract characteristics, and contracting organization used, the generic schedule provides a basis from which Project Managers and the USAEC Environmental Restoration Managers (ERMs) can begin the initial planning process for a PBC at their installations.

For the purposes of this guidance "Army Team" includes USAEC (including the ERM, Branch Chief and Program Manager (PM)), USAEC Support, Technical Program Support, and installation representatives and their technical support (including the Installation Restoration Program Manager (RPM) and Technical Project Engineer (TPE)). "Installation Extended Team" includes the USAEC and/or U.S. Army Corps of Engineers (USACE) District Legal (depending on the contract vehicle selected), the Contracting Agency, and Regulatory Agencies.

2.0 Initial Planning

Once an installation is selected as a candidate for an On-Site Evaluation, Initial Planning begins. Emphasis in this phase is on clarifying lines of communication, identifying respective roles, and sharing information to establish a productive environment in which to work.

USAEC identifies a proposed Army Team to include representatives from USAEC, the Installation, and the USACE, as appropriate, to participate in the On-Site Evaluation. In some cases, the Installation and/or ERM may determine that a conference call would be beneficial prior to the On-Site Evaluation. If so, the ERM schedules this call with the Installation, the Army Team, and any members of the Installation Extended Team who the ERM believes may benefit from participating. The focus of this call is to communicate the PBC initiative; set the agenda for the On-Site meeting, share available installation and site information; and identify and develop paths forward for potential difficulties or challenges anticipated.

Early Communication of the PBC Initiative

<u>Problem</u>: At some installations the PBC initiative is not well understood and still somewhat feared. There is resistance to change. Therefore, if the Army Team is not is not well versed in the goals and how the process works, subsequent dealings with the installation and regulators will be difficult. At one installation, initial meetings were poorly received because of a lack of communication on the goals and objectives and general misunderstanding on the overall PBC process. Several follow up meetings were required before the Installation was comfortable and accepting of the PBC initiative.

<u>Solution</u>: Do the homework, and know the Installation, and be prepared to provide information at any time to ensure there is a good understanding of the process. PBC is not punishment; an evaluation is necessary for all installations.

Information collected in the Initial Planning phase is used by the Army Team to develop draft Site Status Matrices, outlining site status (e.g., list the open sites in the Army Environmental Database – Restoration (AEDB-R) and Army Environmental Database – Cleanup Compliance (AEDB-CC), work completed to date and identifiable uncertainties). Generally, the Army Team uses the most recent IRP and CC Installation Action Plan (IAPs) to complete the matrices. The draft matrices are sent to the Installation in advance of the On-Site Evaluation to allow installation personnel and technical support to review and comment on the contents of the matrix. In some cases, the Installation may complete these matrices. This decision is made by the ERM, in conjunction with the Installation. Because the information on the matrices is considered procurement sensitive, under no circumstance should the matrices be completed by the incumbent contractors. If the Installation expresses interest in completing the matrices, the ERM needs to make sure that it is, in fact, the Installation and/or the USACE technical staff that will be doing the work. The template PBC Status Matrix is included as Attachment 2.1 of this document.

3.0 On-Site Evaluation

The On-Site Evaluation is conducted either as part of (in conjunction with) the Installation's IAP workshop, or as a separate PBC evaluation meeting. The decision on format is made by the ERM, Branch Chief, and the Installation. It also depends on the schedule of the IAP and the complexity of the Installation (i.e., the number of open sites in AEDB-R and AEDB-CC, the phases of the open sites).

The On-Site Evaluation includes a variety of activities intended to inform all participating parties (including regulators, if possible) on the PBC process and Army initiative. During the On-Site Evaluation meeting, stakeholders are provided information on the how the Army Team will collect information; how the information will be used; and how the Army Team will develop recommendations as to the path forward for a potential PBC initiative at the Installation. This includes explaining the After Action Report (AAR), the review/approval cycle and the overall schedule should a PBC be recommended.

The Installation hosts the On-Site Evaluation and arranges for meeting rooms, transportation for a site tour, and appropriate tour guides, when requested. USAEC presents installation management with information about the PBC initiative and implementation. Attachment 3.1 provides the template USAEC PBC presentation.

The purpose of the site tour is to allow the Army Team to view the Installation and individual sites, and to collect site photographs for the Offeror's Site Visit package (if allowed under installation security requirements and if photographs are not available in the IAP document).

What is the status of the Permit?

Lessons learned from installations regulated under RCRA show that if possible, updating the permit prior to awarding a PBC may reduce delays in implementing work later on. There needs to be a clear understanding of the permit status and how closed sites are documented in the permit. While not always possible to update the permit on a schedule that is beneficial to the PBC effort, at a minimum, ERMs should make sure to have discussions with regulators so that there is a clear understanding on what will constitute "regulatory approval" of a site at RIP or RC.

The purpose of the On-Site Evaluation is to:

- 1) Understand the regulatory and legal drivers, including the status of permits, Federal Facility Agreements, etc., for the Installation and/or specific sites;
- 2) Identify the availability of the most relevant documents for all open AEDB-R and AEDB-CC sites (e.g., project documents, schedules, permits, Consent Orders, Federal Facility Agreements). These documents will be made available to the offerors if a PBC is recommended;
- 3) Discuss Installation and site histories and the current remediation phase for open sites, identify AEDB-R and AEDB-CC sites with significant technical uncertainties, and develop an appropriate strategy for managing those uncertainties (i.e., how well can we define the site boundaries?);
- 4) Determine the current status of funding and contracting efforts, including current execution agency(ies) and incumbent contractor(s), and identify appropriate contract transition/break points: and
- 5) Identify the data and assumptions used to develop the current cost-to-complete (CTC).

Open AEDB-R and AEDB-CC sites that are not deemed good candidates for a PBC (e.g., timing will not meet installation needs, remedial investigation not complete) are noted in the site matrix. These sites should have a defined path forward and/or exit strategy to ensure their progress outside of a PBC. Review of other sites such as MMRP and Compliance Cleanup will be conducted in addition to AEDB-R and will be clearly designated as non-ER,A candidates in any documentation or future procurement actions.

The After Action Report

The Army Team will generate the draft AAR approximately one to two weeks following the PBC On-Site Evaluation. The AAR contains a summary of the Army Team findings; discussion of all open AEDB-R and AEDB-CC sites; and a recommendation as to whether the Installation should move forward with a PBC, defer until further activities are complete, or whether the Team believes that the Installation does not a good candidate for a PBC. If the recommendation is to move forward with a PBC, the AAR will also include options for the scopes of work that could be included in the Performance Work Statement

What key decisions need to be made prior to initiating development of the PWS?

- √ What is the scope of the work to be included?
- What type of contract will be implemented?
- √ What contracting agency will be used?
- √ Who will be the Contracting Officer's Representative (COR)?
- ✓ Will there be environmental insurance required? If so, what type(s)?
- / What is the schedule for getting a contract in place (are there key activities that are required prior to the contract?)
- Should we use incentives?

(PWS), as well as options for the contracting agency and contract mechanism (i.e., fixed price with incentives, guaranteed fixed-price, etc.) for implementing a PBC. The goal is to select the contract type most appropriate to accomplish project objectives, taking into consideration the unique and specific conditions of the project/Installation. The Army Team will focus on selecting a contract type that is most likely to motivate contractors to perform. A firm fixed-price contract is generally the best option to ensure cost control. At some installations, significant uncertainties may exist regarding the scope of work, such as uncertainties concerning the extent or nature of contaminants or regulatory standards. In these cases, the Army Team may elect to require the contractors to purchase EI as part of their PBC bid. This insurance helps defray some of the uncertainties associated with the scope of work at the Installation, and may serve to reduce contractor contingencies in the bid. PBCs with EI are GFPR contracts. The template for the AAR is provided as Attachment 3.2.

<u>Decisions Regarding Contract Agency and Mechanism</u>

As noted above, the AAR may also identify the reasonable mechanisms for conducting the remaining work on the Installation. Several options exist including, but not limited to:

- Use of the ACSIM Indefinite Delivery/Indefinite Quantity (ID/IQ) contract (awarded in FY05)
- Use of a USACE District PBC (such as the Louisville Multiple Award Remediation Contract (MARC))
- Use of the USACE-Omaha ID/IQ contract
- Use of local procurement activities such as:
 - APG DOC
 - Robert Morris Acquisition Center (RMAC)
- Use of 8(a), Native American, or Small Business set aside contracts

In the event that there are multiple options for contracting agencies, the ERM will work to determine discriminating factors among the possible solutions. For example, the ERM will work

with the USACE representative to identify the schedules and costs associated with use of their procurement agencies.

The contract mechanism (e.g., Firm Fixed Price, with or without Insurance or Incentives) may also be recommended in the AAR. There are several factors that help in the decision on whether or not to include EI. These factors, along with a discussion on the various types of EI available are included in Attachment 3.3, Environmental Insurance Guide.

The Army Team should also consider use of contract incentives as part of the overall PBC package. Although not widely used to date in the Army's PBCs, the use of incentives may prove beneficial when wanting to determine whether private industry has creative solutions to achieving the desired endpoints.

Incentive Examples							
Basic Performance Objective	Incentive	Why Use an Incentive?					
Closure of Site X to industrial standards (i.e., Remedy in Place (RIP))	Incentive payment of \$100K to achieve closure of Site X to residential standards (i.e., Response Complete (RC))	Industrial standards restrict future property use and may require LUC/ICs. Residential standards provide unrestricted future land use and may save future funding in terms of LUC/IC costs.					
Closure of Site X within 5 years	Incentive payment of \$100K to achieve closure (RIP or RC) of Site X within 2 years	Early site closures may be important to the installation, depending on the site and use of the property. For instance, the Army may be waiting for completion of environmental remediation on land where the installation wants to build a new facility needed to meet its mission requirements.					

Coordination and Staffing of the After Action Report by the USAEC ERM

The draft AAR is provided to the ERM for an initial review. The ERM should review the document for accuracy and completeness. Once the ERM believes the draft AAR is acceptable it can be sent to the Installation for internal Army review. The Installation will determine if additional review will be done by the Corps of Engineers or regulators. The ERM is responsible for discussing the AAR and preferred alternative with the Branch Chief as early in the process as possible. Branch Chiefs should be fully aware of the issues associated with the various options prior to making the final recommendation to the Division Chief.

If the decision is made to move forward with a PBC in the current fiscal year, a Candidate Evaluation Report (CER) based on the final AAR will be developed and staffed. The purpose of the CER is to provide a non-procurement sensitive document to the potential offeror's ahead of a formal release of a procurement action. Once the CER is fully staffed, the CER is posted on the USAEC PBC web site. CERs are not developed for those installations that have been deferred or are not moving on to a PBC. Attachment 3.4 provides a template for the CER.

If PBC is approved for the Installation, the Army Team works with the Installation to develop a proposed schedule for the path forward.

4.0 Performance Work Statement / Request for Proposal Development

4.1 PWS Development

The Performance Work Statement (PWS) is the foundation of the PBC. The PWS describes the specific requirements the contractor must meet in performance of the contract and consists of two main elements: 1) a statement of the required services in terms of output; and 2) measurable performance standards for the output.

The Army utilizes a Generic PWS as a starting point for all PBC PWSs.² The PWS is structured around the purpose of the work to be performed rather than how to perform the work. Use of a generic framework insures that the Army uses consistent language throughout the program for proposal requirements. Starting with the generic PWS, the Army Team develops installationand site-specific performance objectives and measures. The Army Team revises the remainder of the PWS to insert additional installation- and site-specific technical, management, schedule, regulatory, and performance requirements. The Army Team also includes installation- and site-specific descriptions. The Army Team maintains document version control for the PWS and stores all historical versions of the PWS.

There are three versions of the generic PWS. The first is for use with EI and the second is for use without insurance (i.e., a firm fixed-price procurement). There is also a Generic PWS for use with the ACSIM ID/IQ. The Generic PWSs are included as Attachments 4.1, 4.2, and 4.3, respectively. Regardless of which of the three versions is being used, there are several places in the documents where installation-specific information must be included. The generic PWSs are regularly updated on the USAEC PBC Web site. All contracting actions must utilize the generic PWS format in order to minimize inconsistencies across the PBC program. Normally the Army Team will take the lead in constructing the installation-specific PWS. In some cases, the Corps district or installation may wish to initiate the PWS activity. Irrespective of the contracting agency. the generic PWS must be used as the starting point for the PWS. Major deviations from the generic PWS must be flagged for management

What do I need to know about my installation prior to development of the PWS?

- √ What is the regulatory framework?
- What is the status of the permit, FFA, or other formal agreement?
- √ Who is the lead regulatory agency?
- √ Where are document repositories maintained?
- For all sites included in the PWS, what is the desired performance objective (e.g., Remedy in Place or Response Complete)?
- Will the current POM support all activities being included in the PWS on the scheduled proposed?
- What is the designated land use for the sites?
- Is there priority for scheduling work (to support mission need, prepare for property transfer)?

review by the ERM, USAEC Managers and USAEC Legal.

The Army Team is responsible for soliciting feedback on the PWS and recording all received comments. Feedback is typically solicited from the Installation, USAEC, USACE Omaha or

² The PWS may be developed by the Army Team, or by the USACE Installation Technical Support Team. This determination is made by Army leadership and/or installation preference during, or shortly after, the On-Site Evaluation. Regardless of who takes the lead on the PWS development, the draft PWS is shared with the Installation Extended Team for review and comment.

District Legal, the Contracting Agency (APG DOC, RMAC, etc.), and federal and state regulators.

Normally the review team for the PWS includes USAEC Legal, the ERM, the Installation, and USACE (if doing the procurement action). Sometimes the legal offices at the Installation also do a concurrent review. When there are legal issues to be resolved, USAEC Legal will work with the Installation or contract Legal staff to resolve the issues.

All comments received on the PWS are documented in a Comment/Response Matrix that is provided to the ERM when the PWS is complete. The template for the Comment/ Response Matrix is included as Attachment 4.4. Installation-specific comments are addressed in the installation-specific PWS. If the comments are not incorporated into the PWS, an explanation is provided to the commenter and documented in the comment/response matrix. If similar comments are received from multiple reviewers and/or on multiple PWSs, USAEC determines whether any applicable changes should be carried over into the generic PWS.

As with other steps, the use of different contracting agencies and mechanisms may alter the sequence of the steps in the PBC process. In particular, a draft PWS may be released prior to the Offeror's Site Visit and then finalized after initial questions have been addressed during the Site Visit. Regardless of procedure for finalizing the PWS, the PWS is the starting point for Request for Proposal (RFP) development.

Procurement Actions Utilizing USACE

The USACE representative needs to be involved in all steps of the process if this option is selected. The Corps District needs to provide an estimate of what the funds that will be required for the Corps District to perform this support. When USACE has served as the procurement agency they become the Contracting Officer's Representative (COR) for the project and may lead the technical evaluation panels. When USACE is the lead for the procurement, the development of the PWS and Independent Government Estimate (IGE) may change according to the USACE process. Specific items to be addressed that may be different include but are not limited to the need for an acquisition plan, the overall schedule, and the El language (i.e., some of the USACE contracts already have insurance requirements and as such, may overlap with requirements in the PWS.)

Staffing of the PWS within USAEC Prior to Release to Procurement

Once the draft PWS is completed internal Army final review and has been finalized by the Army Team there are several activities that need to be accomplished in order to send it to contracting:

- (1) The PWS must undergo formal internal USAEC Review (sign off should be obtained from the Environmental Restoration, Army (ER,A) Program Manager, Program Management Branch, the ERM Branch chief, Division chief, Legal, and the Financial and Human Resources Division budget analyst).
 - a. A Form 6 must be developed and staffed by the ERM in order to initiate funding for the procurement action.
 - b. Signatures must include Branch and Division chief level personnel.
 - c. USAEC Legal must review and approve the Form 6 before funds are sent by the Financial and Human Resources Division.
- (2) Money must be sent to the contracting office via a PR&C document.

- a. The ER,A Program Manager will allocate the money once contacted by the ERM.
- b. Either the ER,A Program Manager or a Branch Chief can enter the PBC project into AEC Financial Resource Management and set up the funding line to allow the contract to be processed at the appropriate contracting center
- (3) The IGE does not need to accompany the PWS to contracting office at the time of final PWS release but the approximate magnitude of the cost should be provided to the specialist. The preparer of the IGE can provide this order of magnitude estimate to the ERM.
- (4) Procurement offices normally cannot formally begin the staffing of the PWS until the funding document is received.
- (5) Once the contracting office begins internal review of the PWS the contracting specialist will request the ERM identify the Contract Line Items (CLINs) (i.e., deliverables).
- (6) The ERM needs to develop and provide the evaluation criteria to the contracting office to be incorporated into the RFP.
- (7) Once the contracting office has completed their review and are ready to issue the RFP the RFP should be provided to the ERM and Army Team for a final review. Note that in some cases the KO is releasing a draft PWS to the offerors prior to the Offeror's Site Visit. Questions and comments from the site visit are clarified in the final PWS that is sent out to offerors.

4.2 Transition to RFP

The PWS must be incorporated into a Request for Proposal (RFP) in order to solicit proposals.

The Army Team will develop Technical Evaluation Criteria and provide them to the Contracting Agency along with the PWS. An example of the Technical Evaluation Criteria is provided as Attachment 4.5. Utilizing the CLIN Guidance provided below, the ERM will develop the CLIN structure that is also included in the RFP. ERMs are responsible for developing the CLIN structure in coordination with the appropriate Contracting Agency. The ERM also works with the Contracting Agency to draft an appropriate schedule for the RFP release and proposal evaluation.

The ERM is responsible for providing all of the pieces of the RFP (e.g., PWS, technical evaluation criteria, and CLIN structure) to the Contracting Agency and working with the Agency to finalize the RFP. The final RFP incorporates the entire PWS, additional contractual requirements added by the Contracting Agency, the technical evaluation criteria, and the CLIN structure. The Contracting Agency is responsible for releasing the final RFP.

The final RFP must be proofread prior to release to ensure consistency and accuracy, especially with regards to installation- and site-specific information that the Contracting Agency may not have. This review includes the entire Army Team, if possible. A thorough review and final revision help to reduce the number of offeror questions, amendments, and even delays that may result from inaccurate, conflicting, or confusing information in the RFP.

CLIN Structure

To ensure that CLINs are developed in a consistent manner, the following paragraphs lay out the general structure that must be followed when designing a CLIN structure for the PBC solicitations. This CLIN structure is intended to provide general guidance. ERMs should check with the Contracting Officer (KO) for any revisions or additional requirements.

- a. CLINs must be divided into non-severable phases. Depending under which statutory framework the cleanup is being conducted will determine the appropriate terminology for the non-severable "break points" for the CLINs.
 - i. Investigation through Record of Decision (ROD) / Decision Document (i.e., Pre-ROD)
 - ii. Remedial Design / Remedial Action
 - iii. Annual Remedial Operations / Long Term Monitoring
 - b. Additional CLINs for the following activities must be included in the solicitation:
 - i. Environmental Insurance Purchasing insurance at the initiation of a contract, regardless of where the sites are in the cleanup process, provides coverage to the Army by committing insurance companies to accept liability for cost overruns that may occur during any part of the cleanup program, to include the study phase. Based on historic data, there is a strong potential for schedule and cost escalation during the Remedial Investigation/Feasibility Study (RI/FS) phase. By purchasing insurance up front, the Army is "pushing" cost overrun risks onto the insurance company and the contractor. Using environmental insurance in combination with a fixed-price contracting vehicle greatly enhances the likelihood that projected cleanup schedules and budgeted costs to complete all remediation activities will remain on target.
 - ii. Project Management Plan (PMP) The PMP is the "kick off" document which lays out the plan of action to take each site listed in the Performance Work Statement from its current phase through the contracted end point (e.g., Remedy in Place, Response Complete, etc.). This plan must be identified in a separate CLIN and should be purchased upon award of the contract.
 - c. Additional CLINs may be included in the solicitation to address installation-specific studies/activities. Examples of these "special" CLINs include (but are not limited to):
 - i. Groundwater Strategy
 - ii. Optimization Study
 - iii. Record of Decision Amendment

Modifications: Subsequent to contract award, variations to the CLIN structure may be proposed by the Installation or by the winning offeror. Any changes to the CLIN structure will be reviewed by the Contracting Agency and the USAEC on a case-by-case basis and must align with the previously discussed "rules" regarding CLIN structures.

Acquisition Plans

Acquisition Plans are required if the total procurement cost will be greater than \$30M over the life of the contract or greater than \$10M in any one year of the contract. Copies of approved acquisition plans can be obtained from the Army Team (The Generic Acquisition Plan is provided as Attachment 4.6). The RFPs will not be released until the acquisition plans are signed off. The ERM will prepare the acquisition plan and provide it to the Contracting Agency.

The staffing of the Acquisition Plan will be done by the Contracting Agency. The process can be rather lengthy so the sooner these are prepared the less impact there will be to release of the procurement package for bid. If the procurement is going through a USACE District, it may be more efficient to have the District Contracting Office work the Acquisition Plan.

Release of the RFP signals the start of the offeror's Proposal Preparation period and the Army preparations for proposal evaluation.

5.0 Document Preparation

Document Preparation is completed concurrent with the PWS Development and encompasses gathering documentation necessary for proposal preparation and preparing this documentation for release to the offerors in a readily accessible format. This effort can be resource intensive and require a great deal of planning to determine the best mechanism to deliver appropriate documents to the offerors.

Document preparation must begin as early as possible in the process (e.g., during the Initial Planning and On-Site Evaluation), with the bulk of the effort focused early on identification and collection of documentation. The Army Team collects available electronic files from the Installation and determines what (if any) hard copy documents must be scanned to electronic format or copied. Additionally, the Army Team collects from the Installation any available geographic information system (GIS) data that may be useful to potential offerors. Working with the Installation, the Army Team determines the best information dissemination mechanism (i.e., CD or web site) for the documentation and data, based on available resources and access restrictions.

Collected documents are converted to an electronic format as needed and consolidated and uploaded to electronic media such as a DVD, compact disc (CD) or web site. This documentation is made available to offerors upon RFP release through distribution of the electronic media or by providing secure access to the web site.

6.0 Quality Assurance and Surveillance Plan Development

The Quality Assurance and Surveillance Plan (QASP) specifies what steps the Army will take in order to ensure that the contractor performance is in accordance with the PWS performance standards. The QASP ensures that the government receives the quality of services called for under the contract and pays only for the acceptable level of services received. The QASP can be developed in conjunction with the PWS and included as part of the RFP (particularly if incentives are included in the procurement package), or after contract award. If the QASP is developed after contract award, then the QASP is developed between the PBC contractor and the COR, in conjunction with development of the approved Project Management Plan.

The QASP can include positive and/or negative performance incentives. Incentives should be used when better quality performance will result and should be applied selectively to motivate contractor efforts that might not otherwise be emphasized and to discourage inefficiency. When used, incentives are proportional to the indicated level of task importance.

The QASP provides descriptions of procedures that address how to manage both the performance that does not meet performance standards and performance that exceeds performance standards. The relative failure or success of a task performed under the PBC will be determined through comparison to the 'acceptable' performance defined in the QASP.

The QASP defines the standard performance, maximum performance and negative performance incentives, and the units of measurement. If incentives are used, the incentive structure not only provides a meaningful incentive to the contractor but also reflect the monetary and intrinsic value to the government of differing performance levels.

The Army utilizes a Generic QASP as a starting point for all PBC QASPs. The generic QASP includes the description of the plan, a template performance evaluation table, and template evaluation forms. The Generic QASP is included as Attachment 6.1 of this document. When a QASP is included in the PWS the selected Contractor must work with the COR, postaward, to appropriately revise the QASP and incorporate it in the approved PMP.

7.0 Independent Government Estimate Development

An Independent Government Estimate (IGE) provides an estimate of the funds needed to complete the project as described in the PWS/RFP and is the basis for evaluating and/or comparing the cost portion of proposals submitted by offerors.

The first step is development of an IGE strategy that lays out the assumptions and ranges of values and technologies that are reasonable for addressing site needs based on site status and uncertainty. The strategy is initially developed by the Army Team and reviewed and modified by the IGE development team until consensus is reached.

IGEs are developed by using an "accredited" cost estimating protocol such as Micro Computer-Aided Cost Engineering System (MCACES), Remedial Actions Cost Engineering and Requirements (RACER), or RS Means. To improve the quality of the IGEs, the cost estimating protocols are used to develop the "shell" of the overall estimates. Actual vendor quotes or engineering judgment may be used in place of estimates for key cost elements such as waste disposal, in-situ treatment, etc. For instances where there is significant uncertainty in the PWS, the IGE developer will conduct a Monte Carlo Uncertainty Analysis (MCUA) to help portray the significance of the uncertainties on the overall cost estimate. This MCUA can also later be used to establish the agreed upon "walk away point".

Coordination within the Army of the Independent Government Estimate

The draft and final IGEs are provided to the ERM in accordance with the master schedule for the Installation PBC effort. The ERM is responsible for coordinating this date and the number of copies needed with the procurement agency. The ERM will work with the preparer of the IGE to develop a walk away strategy prior to the technical evaluation panel being held. The walk away point must be coordinated with the Branch and Division Chief.

The IGE developer provides a sign-off sheet to the ERM to be signed by both the IGE developer as well as the ERM. This certifies that the ERM has reviewed and agrees with the IGE.

At the completion of this phase, the final Independent Government Estimate is provided to the Army with accompanying supporting documentation (i.e., explanation of assumptions, output from Monte Carlo analysis, CTC vs. IGE comparisons). The IGE developers also provide input and recommendations for the "walk away" strategy (if required). The IGE Development Guidance, Attachment 7.1, provides a more in-depth overview of the IGE development process.

8.0 Offeror's Site Visit

Offerors are provided the opportunity to visit the Installation during the Proposal Preparation phase. The Offeror's site visit is scheduled some time within two weeks of the RFP release. This provides the offerors time to review the RFP and formulate questions.

The Offeror's Site Visit is generally coordinated and managed by the ERM and the Installation. The Installation handles the logistics, including arranging for meeting rooms, transportation, and appropriate tour guides. The bulk of the Visit consists of an installation/site tour, during which an Army installation representative escorts offerors to all sites included in the PWS/RFP and provides a brief summary of the each site's status to date. In some cases the IGE developer will attend the Offeror's Site Visit to see the sites, get a sense of the questions that offerors have, and to help refine the IGE strategy and approach.

The ERM and installation may opt to provide prospective offerors a package of information summarizing the Site Visit. This Offeror's Site Visit Package generally includes the performance objectives, an installation map, and pictures and descriptions of the sites. The template Offeror's Site Visit Package is included as Attachment 8.1 of this document.

Representatives from the Contracting Agency may choose to participate in the Offeror's Site Visit in order to provide answers to non-technical questions. In some cases, regulators participate in the Site Visit in order to provide their perspective on the regulatory framework for the Installation and sites. Their level of involvement varies, depending on their familiarity with the sites and their willingness to speak to the offerors. Upon request, the regulators can make a presentation summarizing their interpretation of data and their desired path forward. Offerors are encouraged to submit questions to the regulators in writing (along with other questions); however, experience shows that they will actively seek regulator interaction during the proposal preparation process.

The Offeror's Site Visit is the only opportunity that offerors have to view the Installation and sites during the Proposal Preparation phase.

Involvement by State and Federal Regulators

At a minimum, both State and Federal regulators need to be involved in the PBC process to the extent they are willing to participate. Successful PBCs are dependent on regulators understanding the nature of PBC. Regulators should receive invitations to participate in the on site evaluation meetings, providing input to development of the PWS, Offeror's Site Visit, and working with the successful offeror. A template letter for invitation of State and Federal regulator participation in the On-Site Evaluation is included in Attachment 8.2. It is critical that the regulators also be aware that the PWS and technical evaluation process are considered procurement sensitive and that they are not free to distribute or discuss materials and information provided to them by the Army. It is critical the ERM utilize procurement sensitive markings on all correspondence related to the PBC effort.

9.0 Proposal Preparation

With the exception of the Offeror's Site Visit, Army Team activities during the Proposal Preparation are limited to answering offerors' questions, determining if and when amendments are required for the RFP, and preparing for the technical reviews of the proposals (see Preparation for Proposal Evaluation).

During Proposal Preparation, all offeror questions are directed to the Contracting Agency. The Contracting Agency distributes questions submitted by offerors to the USAEC or USACE for resolution and releases amendments containing the final responses. Once answers are developed the procurement agency will post the entire question and answer (Q&A) package as an amendment. The ERM should provide a copy of the final Q&A package to USAEC Legal Counsel and the IGE developer. All questions and answers are provided in writing to all offerors through RFP amendments. Last minute questions require the determination of whether to extend the proposal due date. While the Army makes every effort to answer all offeror questions, the Contracting Agency may exercise discretion in limiting Q&A in order to ensure a timely proposal preparation period. These limits may be extended if new information or data becomes available that may significantly alter the offerors' technical approach or bid price.

The Contracting Agency is also responsible for releasing other amendments that may be necessary. In addition to providing answers to offerors' questions, amendments may be released to correct or update information and data in the RFP.

At the end of the Proposal Preparation phase, offerors submit their proposals to the Contracting Agency. The ERM, together with the Contracting Agency, schedules the Proposal Evaluation.

10.0 Preparation for Proposal Evaluation

The Army completes a number of activities in preparation for evaluating the submitted proposals for a PWS/RFP, including formulating a proposal evaluation strategy to ensure that the Army does not misappropriate funds in an effort to award a PBC at "any price".

As previously noted, the IGE is finalized during this phase. The IGE developers work with the Army Team to ensure that all comments and concerns have been addressed and the IGE is finalized. The final Independent Government Estimate is provided to the Army and Contracting Agency with accompanying supporting documentation (i.e., explanation of assumptions, output from Monte Carlo analysis, CTC vs. IGE comparisons). The final IGE is submitted a minimum of one week before the bids are due to the Contracting Agency.

In preparation for the Technical Evaluation Board (TEB), the ERMs (with assistance from the Army Team) develop the TEB checklist, which aids members of the TEB in completing a consistent review of all proposals. The template TEB checklists for GFPR & FFPR, and IDIQ PWSs are provided as Attachments 10.1 and 10.2, respectively.

ERMs are responsible for coordinating dates for TEBs with the Contracting Agency and the Army Team. ERMs need to prepare for the technical evaluation panels by developing a comprehensive notebook including the following information:

- RFP and all amendments (includes PWS)
- Scoping site visit documents
- Offeror's Site Visit(s) documentation
- Offeror questions and answers (should be in amendments to RFP)
- IGE
- TEB checklist

All panel members need to familiarize themselves ahead of time with the technical evaluation criteria and the PWS.

11.0 Proposal Evaluation / Alternatives Analysis

All submitted proposals are evaluated on a technically acceptable, low cost basis by a TEB. Depending on the Contacting Agency, a TEB Checklist may be provided to the TEB for evaluating the proposals and providing the basis for developing the summary reports required by the Contracting Agency.

The panel is comprised of a blend of Army, Corps and Contractor staff to provide needed perspectives for evaluating bids. All members of the TEB are required to sign a non-disclosure statement. The panel chair is required to be a DA Civilian and is frequently the ERM. The proposal evaluation panel is generally comprised of 3-5 evaluators, including some combination of the installation personnel, the ERM, the IGE developer, the PWS developer, a remediation engineer, and a PBC specialist. If the PBC includes EI, the ERM needs to coordinate with the KO to arrange for the proposed insurance policies to be sent to the EI reviewer during the TEB. The EI reviewer does not attend the TEB but rather provides a review of the adequacy of the draft policies to the ERM/KO.

The TEB completes the TEB checklists and provides the proposal evaluation summary sheets to Contracting Agency. The TEB includes clarifications and/ or questions to the Contracting Agency, if warranted. When contract support is utilized on the TEBs, the contractors are there to provide technical input to the voting members of the TEB. Contractors are not considered voting members of the TEB.

Once the evaluation is complete, the TEB also conducts a cost and approach analysis to capture lessons learned for future IGEs. This analysis records the proposed technologies and remedies, as well as corresponding cost information. The purpose of this analysis is to track technology trends and contractor risk management strategies to improve the IGE process.

The efforts of the TEB allow the Contracting Agency to move towards Contract Award, if and when it is appropriate.

12.0 Contract Award

During the Contract Award period, the Contracting Agency enters into a PBC with the selected offeror. The award is based on the technical evaluation and cost considerations.

During this time the Contracting Agency finalizes all paperwork associated with the award, notifies all offerors of the award, and conducts de-briefings with all offerors (if appropriate for the contracting mechanism being used).

The decision as to who will serve as the COR is made at the pre-procurement phase. The proposed COR sits on the TEB and then is appointed by the KO following award. The Installation budgets for the COR function and it may be done by USACE or the Installation. Each procurement agency has its own process.

The final product of this process is the Performance-Based Contract, which is awarded to the selected offeror after negotiations with the Contracting Agency and Army representatives.

13.0 Post-Award/Contract Implementation

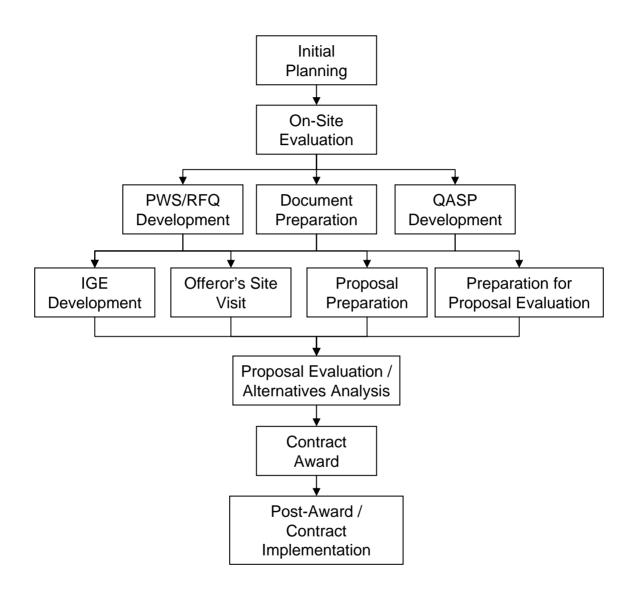
Once the contract has been awarded, many issues and questions may arise because of the relative new type of mechanism. However, regardless of the contract type, the role of the COR will be defined by the Contracting Agency. Guidance is available from the KO, and the KO will be available for questions and resolving contractual questions.

Any required EI must be obtained and bound/reviewed in the months following award. The PMP is also developed and approved in the initial months following award.

Post-Award Roles and Responsibilities

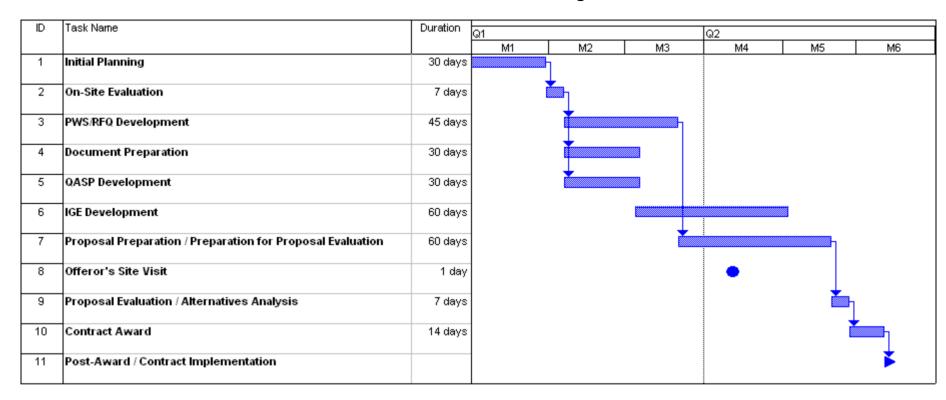
The ERM continues in an oversight position, and is the key point of contact for assuring that the appropriate funding requests are submitted. The ERM remains the primary point of contact between the Installation/COR and USAEC, and approves release of expenditures for new CLINs. The ERM will coordinate between the Installation and USAEC Legal, as well as CHPPM for review of key documents. The Branch Chief and Division Chief remain the final decision makers.

Attachment 1.1: Framework for Implementing PBC USAEC Performance-Based Contracting Guidebook



Attachment 1.2: Step-by-Step PBC Process Present info about PBC program Determine current site execution & **USAEC Performance-Based Contracting Guidebook** funding status Develop site histories, kev Evaluate proposals based on assumptions, & potential difficulties pre-defined evaluation criteria Collect documentation · Develop document list & collect Determine best information provided in the PWS/RFQ documentation · Identify regulatory & legal drivers dissemination mechanism · Provide evaluation of each Utilize Installation resources proposal to Contracting Agency · Make documentation easily Collect site photos Provide "script" for Installation · Capture technology trends and accessible Develop initial schedule · Invite Regulators to attend Provide documentation upon contractor risk management • Finalize Army Team Document Q&A RFQ release strategies Involve regulators **Objectives** Develop performance Define performance standards objectives & measures Develop positive/negative incentives · Share available info Develop technical Specify QA procedures with Installation Team evaluation criteria Develop path forward · Provide answers to offeror Determine effective auestions Coordinate schedules Identify appropriate Market PBC concept contracting mechanism · Develop amendments remedy strategies Obtain input from Legal, Determine best approach Refine IGE Prepare for On-Site Contracting Agency, & Develop "walk away" & **Evaluation** for developing IGE Regulators Develop defensible IGE "fall-back" strategies Proposal **Proposal Preparation** Post-Award On-Site PWS/RFQ QASP IGE Offeror's Initial Document Evaluation / Contract / Preparation for Contract Development Development Site Visit **Planning** Evaluation Development Preparation Alternatives Award Evaluation Implementation **Analysis** • QASP Initial conference call PWS: Performance **Amendments** AEDB-R queries objectives & measures Q&As Contract Award **Draft matrices** RFQ: Contract Final IGE Summary IGE with supporting • "Walk away" & "fall-back" mechanism. Technical documentation evaluation criteria strategies Input for "walk away" strategy Comment/response Monte Carlo Uncertainty matrix Analysis (MCUA) CLIN structure **Outputs** Offeror's Site Visit package Attendee list Q&A documentation Electronic documents TEB checklist After Action Report/Option Analysis Candidate Evaluation Report · CDs or web site Proposal evaluation summary sheets to Contracting Office Site photos Proposed schedule Alternatives analysis Final Army Team

Attachment 1.3: Generic PBC Schedule USAEC Performance-Based Contracting Guidebook



Attachment 2.1: Template PBC Status Matrices USAEC Performance-Based Contracting Guidebook [INSTALLATION]

Site ID (AEDBR #)	Site Name	Regulatory Driver	Rel Risk	Problem Statement	Likely Response(s)	Uncertainties	CTC minus LTM (in 000's)	LTM Costs (in 000's)	(in 000's)	LTM Start Date/ Duration		Additional Comments/Questions
AEDB-R	AEDB-R and/or	(e.g.,	AEDB-R	What is driving need for	What is the most likely path	What significant uncertainties	AEDB-R	AEDB-R	AEDB-R	Year(s)	What actions will	Any additional information which
and/or IAP	IAP site name	CERCLA,	and/or IAP		forward? May include more	exist that will make decisions	and/or IAP		and/or IAP		delay remedy	should be notes, including special
site number		RCRA,		drivers, risk-based drivers, and	than one alternative.	on response actions difficult?	CTC (less	LTM CTC	Total CTC		selection and	circumstances and regulatory
		UST)	rating	other drivers.		What data needs, versus data	LTM)				implementation?	challenges.
						gaps, exist?						
AEDB-R Activ	ve Sites											
MMRP Sites												
WIWIRP SILES												
Compliance Cleanup Sites												

PROCUREMENT SENSITIVE

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Attachment 2.1: Template PBC Status Matrices USAEC Performance-Based Contracting Guidebook [INSTALLATION]

Site ID (AEDBR #)	Site Name	Executor (e.g., USACE)	Contractor(s) (incl. subcontractors)	Work Completed to Date	Work Currently Under Contract & Status	Est Completion Date for Work Under Contract	Will Contracted Effort Achieve Site RIP/RC?	Scope of Effort Reqd' to Reach RIP/RC	Projected Start/End Dates for Remaining Scope	Is Contract Awarded or Negotiated?	Is Scope of Effort to Reach RIP/RC Fully Funded?
AEDB-R and/or IAP site number	AEDB-R and/or IAP site name	Corps District			Description of work under contract (incl final products/reports)	Month / Year	Yes / No	Future remedial phase(s)	Year(s)	Yes / No	Yes / No

PROCUREMENT SENSITIVE

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Attachment 2.1: Template PBC Status Matrices USAEC Performance-Based Contracting Guidebook [INSTALLATION]

Site ID (AEDBR #)	Site Name	Most Current Document and Status (e.g., draft, final)	Electronic/Hard Copy
AEDB-R and/or IAP site number	AEDB-R and/or IAP site name	Document Title	(Electronic, Hard Copy, or Both)



PERFORMANCE-BASED ACQUISITION



PERFORMANCE-BASED ACQUISITION OVERVIEW

On-Site Evaluation Meeting



PERFORMANCE-BASED ACQUISITION

Purpose

- Outline Performance-Based Acquisition Initiative for Army's Installation Restoration Program (IRP)
- Discuss why Army is proceeding with PBA
- Discuss roles and responsibilities in PBA implementation

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PERFORMANCE-BASED ACQUISITION

Background

- Performance-Based Acquisition (PBA) is a federal government-wide initiative
- Army began using PBA for environmental cleanup projects in 1999
 - Use of Guaranteed Fixed Price Remediation (GFPR) contracts
 - Pilots at both BRAC and active installations
- PBA is an initiative of both DoD and Army Business Initiative Councils (BICs)
- US Army Environmental Center is implementing the Army's PBA initiative through performancebased contracts (PBCs)

PERFORMANCE-BASED ACQUISITION

Army Environmental Cleanup Strategy

- Released April 2003 by Assistant Secretary of the Army (Installations & Environment)
- Provides roadmap to guide Army in attaining its environmental cleanup vision
 - The Army will be a national leader in cleaning up contaminated land to protect human health and the environment as an integral part of its mission.
- Lays groundwork for identification and development of a framework to achieve program goals and objectives

Encourages development and use of innovative business processes to improve the efficiency of the environmental cleanup program

PERFORMANCE-BASED ACQUISITION

What is PBA?

- Performance-Based Acquisition (PBA) is a mechanism that solicits bids on the basis of what RESULTS you want achieved rather than what ACTIVITIES you want conducted
- General characteristics of Performance-Based Acquisition
 - Contract for "What," not "How"
 - Clearly define objectives, milestones, and standards
 - Use incentives or environmental insurance to enhance performance
 - Incentives are inherent in PBAs
 - Promote flexibility in exchange for accountability
 - Use fixed price contracts

PBCs are monitored to ensure performance is being achieved

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PERFORMANCE-BASED ACQUISITION

PBA Contract Types

- Acquisition "Tool Box" for Performance-Based Acquisitions includes:
 - Fixed Price Remediation with Performance Work Statement (PWS)
 - Fixed Price Remediation with or without Incentives
 - Guaranteed Fixed Price Remediation (GFPR)
 - With Cleanup Cost Cap Insurance, with or without Pollution Legal Liability Insurance
 - Large and small business awards

KEY - Be less prescriptive and contract for objectives and results

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PERFORMANCE-BASED ACQUISITION

PBA Mechanisms

- For Army Active Sites, PBA Mechanisms must exhibit the following characteristics:
 - Use fixed-price contracts
 - Ensure at least 3 qualified vendors compete for an award
 - Define performance objectives, milestones, and standards
 - Use incentives or insurance to enhance performance
 - Provide flexibility and ensure accountability for results

KEY - Be less prescriptive and contract for objectives and results

Source: Memo, Office of the Director of Environmental Programs, 22 Jul 04

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PERFORMANCE-BASED ACQUISITION

Metrics

- Installation Restoration Program PBA goals:
 - FY03: 3-5% of total program achieved 9% (\$37M)
 - FY04: 30% of total program achieved 36% (\$141M)
 - FY05: 50% of total program achieved 51% (\$202M)
 - FY06: 60% of total program achieved 54% (\$240M)
 - FY07+: 60% of total program \$248M Goal

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Metrics

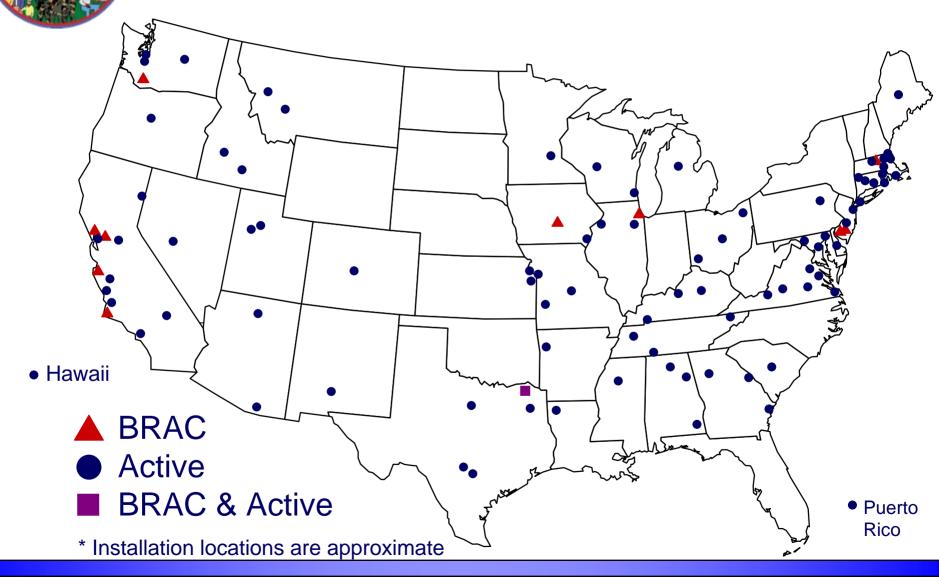
- BRAC (either PBA or Environmental Services Cooperative Agreement):
 - FY06: 60% of remaining sites
 - FY07+: 70% of remaining sites
- FUDS:
 - FY06: 15% of total program
 - FY07: 25% of total program
 - FY10+: 50 % of total program



Results of the PBA Initiative

- Since 2000, Army has awarded 53 performance based contracts (PBCs) at Active Army Installations
 - ~\$587 million obligated on PBA contracts
 - Contract values range from \$548 K to \$52.4 M
 - Contracts in 38 states, Puerto Rico, and all 10 EPA Regions

ARMY PBC AWARDS AS OF THE END OF SEP '06



PBA Accomplishments (as of 6 Dec 06)

Installations		Sites	CTC (\$M)	IGE (\$M)	Contract Award (\$M)	CTC - Contract (\$M)	IGE - Contract (\$M)
FY01-02	Fort Gordon, Fort Leavenworth	50	42.200	42.200	39.391	2.809	2.809
FY03	Fort Dix, Fort Jackson, Lake City AAP, Ravenna AAP, Sierra Army AD	68	119.998	117.306	98.795	21.203	18.511
Aberdeen PG - Graces Quarters, Aberdeen PG - Other Aberdeen Areas, Fort Detrick, Fort Irwin, Fort Rucker, Holston AAP, Hunter AAF, Iowa AAP, Louisiana AAP, Milan AAP, Reserves, Riverbank AAP, Rock Island, Fort Leonard Wood		143	276.090	203.556	152.738	123.351	50.818
FY05	APG-Bush River, APG – EA Groundwater, APG-Westwood, Camp Bullis & Fort Sam Houston, Camp Navajo, Fort Gillem, Fort Knox, Fort Meade, Fort Pickett, Hawaii – Tripler/Schofield, Joliet AAP, Longhorn AAP, Camp Crowder & Ft. Chaffee, Los Alamitos & Camp Roberts, Ravenna AAP, Red River, Redstone, Soldier Systems Center	213	242. 558	205.016	172.474	70.084	32.541
	Military Munitions Response Program – Site Inspections	67	2.171	4.619	0.901	1.270	3.719
FY06	APG G Street, Dugway Proving Ground (DPG) Phase I, DPG Phase II, Fort Leonard Wood Phase I, Fort McClellan, Hawaii, Hawthorne AD, Picatinny Arsenal, Radford AAP, Volunteer AAP	169	173.465	164.463	108.352	65.114	56.111
	Military Munitions Response Program – Site Inspections (2 awards)	119	12.371	7.829	4.820	7.551	3.009
FY07	Fort Campbell	12	11.448	14.281	9.304	2.144	4.977
	Military Munitions Response Program						
Cumulative		851	880.301	759.270	586.775	293.525	172.494
Cost Avoidance on all PBCs (based on CTC)			33.3%				
Cost Avoidance on all PBCs (based on IGE)				22.7%			



PBA for Environmental Cleanup

- Goal is for Contractor is to achieve one or more of the following performance objectives for each site identified in the Performance Work Statement:
 - Response Complete
 - Remedy in Place
 - Long-term Monitoring/Successful 5-year Review (or equivalent)
- Environmental Insurance <u>MAY BE</u> used to protect against cost overruns above the estimated remediation cost



Why Use PBA?

- Performance-Based Acquisition is intended to improve cost and schedule performance without compromising cleanups that are protective of human health and the environment
 - Lower risk of cost growth
 - Accelerates cleanup / property transfer
 - Reduces contract reporting and oversight
 - Can be aligned to exit strategies or used to optimize systems
 - Cost effective / lower remediation costs

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PERFORMANCE-BASED ACQUISITION

IRP History

- Significant variation in program performance
 - Cost and schedule baselines not uniform.
 - Progress toward completion lacking
 - Cost-to-Complete increasing or unstable
 - Schedules slipping
 - Completing only 60-70% of planned versus actual milestones
 - Program not incentivized for completion

CHANGE NEEDED TO GET DONE



Safety vs. Speed?

- PBA does not trade safety for speed
- Safety and quality can be incentivized
- Innovation can be incentivized
 - Perception is that private cleanup goes faster
 - Learn and apply the proven private sector practices



Strategy to "Get it Done"

- Increase use of PBA
 - Use incentives for innovation and reaching program completion
- Streamline Army Cleanup infrastructure
 - Get more dollars to the ground doing actual cleanup
- Decrease the number of contract overruns & change orders
- Reduce variability in program performance and optimize project baselines



Approach

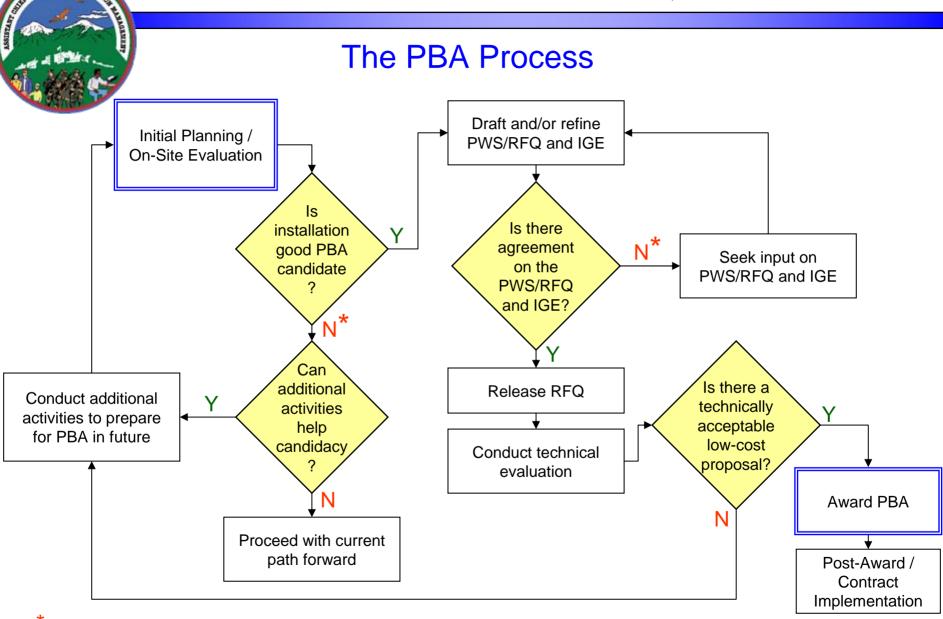
- Develop corporate acquisition tools ("Toolbox") to accelerate cleanup/closure
- Increase competition
- Maintain contracting flexibility to improve cost effectiveness
 - One size does not fit all circumstances
- Contractors must be accountable for their performance



What is the Army Doing Differently?

The Army PBA effort is:

- Generally focusing on adequately characterized sites
- Defining a discreet scope with well-defined end states, bought-in by regulators
- Understanding the cost including high, low, most likely and walk-away parameters
- Making adequate if not all funding available to support the project schedule
- Utilizing the highest rated underwriters, combining CCC and PLL where appropriate, requiring a Waiver of Subrogation, and listing the Army as additional insured



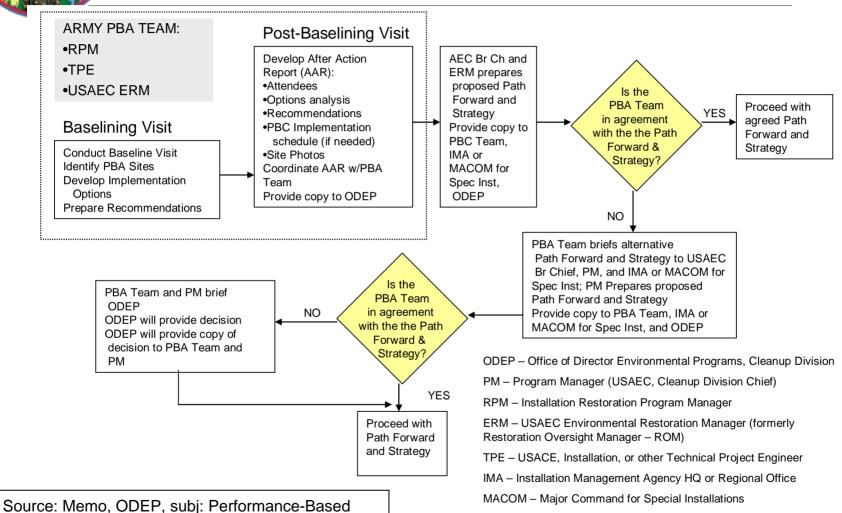
^{*} Decision making at these points is guided by the 22 Jul 04 ODEP Memo (see next slide)

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Remediation Contracting at Active Sites, 22 Jul 04

PERFORMANCE-BASED ACQUISITION

PBA Decision-Making Process





Collaboration

- The Army will continue to work with Regulators and Communities when considering options for Performance-Based Acquisitions
- The Army, as the federal lead agency, still remains responsible for the cleanup with the same level of coordination with EPA and state regulators



Role of the Installation Restoration Program Manager

Little change! Installation RPM still...

- Oversees contract
- Interfaces with Regulators, along with Contractor
- Interfaces with Public
- Manages and monitors long-term operations
- Manages contract cost, schedule, and reporting
 - Army has centralized restoration program management and database management at the US Army Environmental Center for improved data quality and ease of reporting/response to out of cycle data calls

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PERFORMANCE-BASED ACQUISITION

Role of the Regulator

- Beginning with initial scoping meetings, may attend information sessions with installation personnel and contract team
- Participate in development of performance measures for the contract, and may comment on the Performance Work Statement
- Participate in Bidders' conferences to present regulatory views to prospective contractors
- After project begins, continue to maintain active role by reviewing remedial activities prior to implementation
 - Provides comments on site documents

GOAL - Concurrence with remedy completion

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PERFORMANCE-BASED ACQUISITION

Role of the Restoration Advisory Board (RAB)

No change! Public retains stakeholder involvement in decision-making process and still...

- Provides advice on environmental restoration issues
- Conducts regular meetings open to the Public
- Keeps meeting minutes that are available to the Public
- Reviews, advises, and comments on environmental restoration documents
- Recommends project requirements
- Recommends site cleanup priorities
- Provides advice and comments on restoration issues
- Represents and communicates Community interests and concerns

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PERFORMANCE-BASED ACQUISITION

Army's Responsibilities

- Army fulfills its program responsibilities by:
 - Approving all performance / remedial objectives
 - Maintaining the Administrative Record
 - Reviewing & signing agreements / Decision Documents
 - Maintaining primary interface with Regulators & Public
 - Certifying all deliverables / milestones
- Army is the final decision authority for award, oversight, and payment

ARMY RETAINS ULTIMATE ENVIRONMENTAL LIABILITY

THE PARTY OF THE P

PERFORMANCE-BASED ACQUISITION

Summary

- Performance-Based Contracts Responsibilities:
 - Army remains responsible for cleanup
 - Contractor is accountable to the Army for their performance
- Seeking EPA/State input on contract performance measures (objectives and standards)
- Army/EPA/State need to continue to partner to ensure performance measures are met – ensures satisfactory project completion and closeout
- Army will continue with success achieved in Fiscal Years 2003, 2004, 2005, and 2006.

THE PARTY OF THE P

PERFORMANCE-BASED ACQUISITION

FY07 PBA Candidates

- Aberdeen Proving Ground Canal Creek, MD
- Alaska Haines Terminal AK Award Pending
- Anniston Army Depot, AL
- Badger AAP, WI
- Dugway Proving Ground Phase III, UT
- Fort Bragg, NC Award Pending
- Fort Campbell, KY Awarded
- Fort Carson, CO
- Fort Eustis & Fort Lee, VA Award Pending
- Fort Leonard Wood Phase II, MO
- Fort Lewis, WA
- Fort Myer, VA
- Letterkenny AD, PA
- Redstone Arsenal Phase II, AL
- Rocky Mountain Arsenal, CO
- Yuma Proving Ground, AZ
- Remedial Action Operation/Long Term Monitoring (RA(O)/LTM)



RESOURCE

http://aec.army.mil/usaec/cleanup/pbc00.html

Performance-Based Acquisition web page

Attachment 3.2: Template After Action Report USAEC Performance-Based Contracting Guidebook [INSTALLATION] On-Site Evaluation

1.0 Introduction

The U.S. Army Environmental Center (USAEC) conducted a program review of the open sites under the [INSTALLATION] Installation Restoration Program (IRP) and Compliance-Related Cleanup (CC) Program on [DATES]. The purpose of this review was to present and discuss the Army's Performance Based Contracting (PBC) Initiative with the project stakeholders; the Installation, the [STATE REG], and the Environmental Protection Agency (EPA) Region [REGION].

[Brief Installation background and regulatory information inserted here.]

Discussions during the review focused on identification of current obstacles facing [INSTALLATION] in their quest to achieve environmental cleanup and/or regulatory closure of all of their sites. More specifically, the objectives of the review were to:

- 1) Provide an overview of PBC and the Army's FY06 goals to the project stakeholders:
- 2) Provide the PBC team with a brief history of the Installation, an overview of the regulatory requirements and remediation activities performed at the Installation, and the current status of remediation activities:
- Address specific concerns raised by project stakeholders regarding appropriate involvement, Army decision making, and regulatory review required in the PBC planning and implementation process;
- 4) Determine the current action plans for open sites and potential paths forward to achieve Remedy in Place (RIP) or Response Complete (RC) at each site; and
- 5) Outline the future work planned and schedules for implementation.

The review focused on all open Army Environmental Database-Restoration (AEDB-R) and Compliance Cleanup (AEDB-R & AEDB-CC) sites identified in the FY2006 [INSTALLATION] Installation Action Plan (IAPs) for both IRP and CC sites. In general, these discussions covered the planned path forward for each site, key uncertainties, and the execution status of each (i.e., where are they in the restoration process, what are the planned next steps, what work is under contract, what work is funded, how the existing contracts are managed/executed, etc.). A site tour of open project sites occurred on [DATE].

The results of this review, including a list of sites, are captured in the Summary Table below.

Revised: [DATE]

Attachment 3.2: Template After Action Report USAEC Performance-Based Contracting Guidebook

[INSTALLATION] On-Site Evaluation [DATES]

2.0 Summary Table

Installation	
Open, AEDB-R Remediation Sites	
Open, AEDB-R Other Sites	
Open, AEDB-CC Sites	
Remaining Scope and Likely Path Forward for Open Sites	
Total Cost	
Anticipated Contract End Date	
Outstanding Issues/Items of Interest	

Site descriptions are included in the matrices, included as Attachment 1.

3.0 Options Analysis

The range of options for the scope of work to be covered by a PBC at [INSTALLATION] is presented in Table 1 along with several advantages and disadvantages for each option. These options include the following:

Option 1 No PBC; allow [INSTALLATION] to continue under current plans.

Option 2 Award fence-to-fence PBC

Option 3 Award PBC for SUBSET OF SITES

The range of contracting options for implementing a PBC at [INSTALLATION] is presented in Table 2 along with several advantages and disadvantages. These options include the following:

Option A Contracting through the [CORPS DISTRICT]

Option B Contracting through the AEC ID/IQ

Attachment 3.2: Template After Action Report USAEC Performance-Based Contracting Guidebook [INSTALLATION] On-Site Evaluation [DATES]

Option C Full and open competition through [CONTRACTING AGENCY]

Table 1: Options for Scope of Work to Include in PBC at [INSTALLATION]

Option 1:				
Advantages	Disadvantages			
•	•			
Option 2:				
Advantages	Disadvantages			
•	•			
Option 3:				
Advantages	Disadvantages			
•	•			

Table 2: Options for Contracting Vehicle for PBC at [INSTALLATION]

Option A:				
Advantages	Disadvantages			
•	•			
Option B:				
Advantages	Disadvantages			
•	•			
Option C:				
Advantages	Disadvantages			
•	•			

4.0 Recommendation

The recommendation is [RECOMMENDATION].

5.0 Decision

The decision is [DECISION].

Once the decision is made to proceed with a Performance-Based Contract (PBC) at an installation, the next step is to identify the scope of effort that will be included in the performance work statement (PWS), and then to determine whether Environmental Insurance (EI) will be included as part of the overall package. For the purposes of this document EI can be broadly delineated between Cleanup Cost Cap (CCC) and Environmental Impairment Liability/Pollution Legal Liability (EIL/PLL) insurance coverage. Because appropriated funds are expended to purchase the EI, we must carefully consider whether we use EI, and then determine the appropriate insurance coverage that would provide the maximum risk/reward benefit for the Army and the PBC Contractor.

The following provides guidelines/considerations for assisting in the determination of whether the Army should use EI in conjunction with PBCs as a means of reducing risk to the Army. This Guide is meant to focus discussion; however, each installation, and each site at an installation that is included in the PWS, needs to be evaluated as to the merits of EI based on specific conditions. An options analysis (i.e., pros/cons) for EI should be developed by the PBC Team and presented to Army Management. If consensus is reached on the part of the PBC Team, then the analysis can be presented in the form of a recommendation. However, the decision to use EI is a risk management decision that needs to be made by the Army Resource Managers (USAEC Branch Chief, BRAC Resource Manager), with recommendations from the USAEC Restoration Managers and the PBC Team.

Once the decision is made to use EI, the PBC team should consult with insurance experts/consultants for assistance in matching the insurance specifications to the project. Insurance terminology often has special meaning for certain words in a particular order. It is therefore recommended that subject matter experts review the insurance specifications prior to releasing the RFP.

Reasons for Using El

The Army has been doing firm fixed price (FFP) contracting for years, but with varied levels of success. FFP contracts are frequently modified for a myriad of reasons -- for change in scope, finding new site conditions and contaminants, regulator requests – to name a few. As such, the concept of FFP in the environmental remediation arena has not necessarily meant that the work would be accomplished for a set price, but rather the work would be initiated for a set price and would more than likely be modified before the contractor completed the original scope of work. Through the use of EI, combined with PBCs, the Army can reduce the risk of cost overruns and schedule creep. Although the cost of EI can generally range from 6 - 15% of the project cost (for those activities requiring insurance) depending on the work to be accomplished, this still represents a reasonable and valuable tool for the Army because the cost to achieve an objective is known. The insurance guarantees the Army that the work will be completed for a set budget. History has shown that the cost to complete projects often exceeds the original estimate by far more than the 6-15% insurance premium.

Not only does the EI cover cost increases due to cost/schedule growth on projects, but EI provides an additional aspect of financial risk management for the Army and the contractor. Traditionally fixed price construction projects for the federal government have been bonded with a performance bond. A traditional performance bond guarantees the completion of the project regardless of the time to perform the work or the amount it costs. In the event the contractor is

unable to complete the project, the bonding company will either pay the original contractor to complete the job or will find a replacement contractor to do so.

However, when using performance bonds, there is no risk transfer away from the contractor under a performance bond. Any amount the bonding company pays to complete the project can be recovered from the bonded contractor. However because of the complexity and duration of PBCs there is not sufficient performance bond capacity to bond these projects¹. Without a performance bond on the contract the Army assumes the risk of contractor non-performance. The EI can provide a tool to reduce the overall financial exposure to the contractor and the Army because the contractor can collect under the CCC policy for cost over runs thereby reducing the financial risk of the contractor for under priced work. The potential non-performance risk for the Army is also reduced because a contractor has a source of funding in the CCC policy for cost over runs. In the case of contractor default, the policies are assignable to another acceptable contractor to implement the remedy. Unlike performance bonds, EI is true risk transfer for the contractor. Above the self-insured retention, the insurer pays for the cost to complete the project and the contractor is only responsible for the co-insurance. The contractor is not required to reimburse the insurance company.

In addition, during the bid process, the insurance companies conduct an independent technical evaluation of the site conditions and proposed remedies to assess whether they are willing to insure a project. The insurance premiums and endorsements/exclusions found in the insurance quote shed a light on what the insurance companies are most concerned with, where the most significant risks may reside, and whether they will agree to insure certain aspects of a project. In some cases, the Army has made changes to the PBC scopes mid-way through procurement because of concern on the part of the insurance companies and/or high cost estimates that are driven by uncertainty. Having a third party with a vested interest in the outcome of the remedy provides an outside view of the likelihood of success at a site.

Finally, there is some indication, particularly from publicly held firms, that they will reduce their contingencies (and as such their overall price to the government) when an insurance policy is made available. An insurance policy allows firms to better manage their financial risk profiles, and as such, allows them to stay in the PBC marketplace because they are not putting their firms at risk by having too much equity tied up in individual contracts. It is in the Army's best interest that the PBC marketplace stays open to a wide range of firms to ensure quality and competition as the PBC initiative matures and is actively used as a contracting tool in multiple programs.

2

¹ The bond market for hazardous waste projects is different than general construction. There are fewer markets for hazardous material restoration. There is virtually no bond market for remediation projects exceeding 5 years in length and anything longer than two years is very difficult.

When to Use El

This guidance discusses two primary types of El: 1) Cleanup Cost Cap (CCC) insurance; and 2) Environmental Impairment Liability (EIL), also referred to as Pollution Legal Liability insurance (PLL). In addition to EI, the Army also seeks Comprehensive General Liability (CGL) Insurance and Contractors Pollution Liability (CPL) coverage from its contractors. The specifications for the CGL insurance, CPL insurance, and EI are contained within the PBC EI Specifications, included as Attachment A to this document, *Generic PBC Insurance Specifications*.

The following text provides basic descriptions of each insurance type along with decision points that guide whether or not to include EI with the PBC.

CCC Insurance:

CCC policies cover the remediation of known and unexpected (unknown) pollution conditions discovered while implementing the remedial plan that the contractor furnished to the underwriter as part of the insurance application. CCC insurance covers unknowns but within a very narrow definition of unknowns discovered while completing the remedial plan. For example, if a contractor proposes to the insurance company that the "remedial plan" includes source removal and in-situ treatment of a solvent plume at Site A, then the CCC policy is likely to cover such things as higher concentrations than expected, increased volume of soils removed, additional chemical injections required, etc., all things associated with their proposed remedy at Site A. The coverage gets less certain as unknowns are introduced that are not clearly associated with Site A, or are not within the exact boundaries of where Site A was thought to be.

The EI specifications are configured to make sure that the CCC policy will cover as many unknowns as possible. By requiring that the definition of "remedial plan" incorporates the PWS, objectives, and standards, there is less likelihood that a CCC policy will not cover unknowns associated with a remedial approach. There is still some room for interpretation as we move farther away from the defined site. As discussed in the next section, EIL/PLL can provide coverage for unknowns outside of the defined site, and can be considered for inclusion in the PWS requirements to better manage overall financial risk.

When determining whether to include CCC insurance for all or some of the sites included in the PBC, the PBC Team should take the following into consideration. If the PBC Team can answer "yes" to any or all of these questions, consideration should be given to include CCC coverage in the PWS:

- 1. Are there significant potential cost uncertainties associated with achieving the performance objective? The PBC Team needs to consider the technical challenges of the work included in the PBC scope (e.g., dense non-aqueous phase liquids [DNAPL] in karst) and the uncertainties associated with those challenges (e.g., How certain are we that the selected remedy will work within budget? How certain are we that the regulators will approve a strategy that relies on a Technical Impracticability Waiver?) that could, under a traditional FFP scenario lead to a need for change orders.
- 2. Is there significant risk of cost or schedule overrun associated with achieving the performance objective(s)? The PBC Team needs to consider the performance history at the installation and the factors associated with cost overruns. For example, if there

have there been erratic CTC estimates, what are the factors that have driven these (e.g., cost estimating assumptions, change in contractors or regulators)? Is the regulatory framework complex? Is this a National Priorities List (NPL) installation with a Federal Facilities Agreement (FFA)? Just because the Army is changing contract mechanisms and (potentially) the contractors working at the site, it does not mean that all of the past challenges will be removed.

- 3. Is the anticipated award price for the insured components of the PWS greater than \$2 million? Generally, insurance providers will not consider insuring a site/installation that is less than \$2 million. Thus, when the Cost-to-Complete (CTC) is less than \$2 million, insurance should not be considered. For projects in the range of \$2.0 \$7.0 million, EI premiums generally cost in the range of 10-12% of the total proposal price. For larger projects, EI premiums generally run in the 8-10% range for CCC insurance. If EIL/PLL insurance is required, it generally runs 1-2% of the total price, regardless of the overall project price.
- 4. Is the contract to be let full and open or competed among like size firms? If competed on a full and open basis, the PBC Team should consider use of insurance. This allows a level playing field of financial security for all firms, regardless of size.
- 5. Are we hoping to encourage use of innovative technologies? Use of EI affords companies the opportunity to pursue the use of innovative technologies because funds are available should the innovative approach prove unsuccessful. In some cases, the Army will benefit from innovation, rather than a more traditional approach (e.g., in-situ treatment versus excavation). For example, at a military installation, one bidder proposed an in-situ remedy to address a groundwater plume (molasses injection). A second bidder proposed a more traditional approach of a pump and treat system. The cost of the in-situ remedy plus CCC insurance was less than the pump and treat approach, and left less of a long-term management "tail" for the Air Force to address. In this case, the remedial approach selected was the innovative technology plus insurance because even if the in-situ technology was not successful, the CCC insurance would provide the funding necessary to implement the contingent remedy (i.e., the pump and treat system).
- 6. Is the financial risk to the contractor substantial? A general rule of thumb for private industry is that the company should never risk more than 10% of owners' equity on a single project. Following these guidelines, smaller firms will be limited in their ability to work on PBCs without the benefit of EI to help manage their risk profile for the Guarantee Amount. For larger, publicly held firms, EI may prove vital to their ability to gain support for bidding on PBCs from their management and shareholders due to increased regulatory scrutiny of unfunded contingencies on balance sheets.

Environmental Impairment Liability/Pollution Legal Liability (EIL/PLL):

EIL/PLL policies insure potential third party claims from a job site and the cleanup of unknown pollution conditions that are not insured under the CCC policy (discussed in the CCC insurance section). Insuring the "unknowns" in two policies may look redundant but it is not. Whereas the CCC coverage is designed to insure the unknowns discovered while implementing the remedial plan, the EIL/PLL policy provides broader coverage for unknowns because it covers third party liability and cleanup for site conditions not insured in

the CCC policy. The EIL/PLL policy also insures re-openers once a site achieves regulatory closure. To eliminate potential overlaps in coverage the EIL/PLL policy will typically exclude cleanup costs that are insured under the CCC policy. Working together the policies cover unknowns discovered during the implementation of the work plan and the discovery of unknowns that may be outside of the contractors insured work plan in the PWS.

When determining whether to include EIL/PLL coverage for all or some of the sites included in the PBC, the PBC Team should take the following into consideration. If the PBC Team can answer "yes" to any of these questions, consideration should be given to include EIL/PLL coverage in the PWS:

- 1. Is this a BRAC/Excess Installation? In general, if the PBC is being awarded for a BRAC/Excess facility, the team should include EIL/PLL coverage because of the ability to insure for third party liability. In particular, when the Army is looking to implement early transfer of parcels of land, Local Reuse Authorities (LRAs) are not likely to accept the property without an EIL/PLL insurance policy in place. While it is most common to place EIL/PLL coverage on an installation that is also covered by CCC insurance, it may be possible to only place EIL/PLL insurance. An EIL/PLL policy without underlying CCC insurance in place will include numerous exclusions and exemptions that will be designed to protect the insurance company from having to provide coverage for the cleanup of known constituents and conditions that would normally be covered in the companion CCC policy.
- 2. Is off-site transport and disposal of waste likely? If yes, then the PBC team should consider either specially modified PLL or CPL insurance covering non-owned disposal sites because of the following:
 - ↓ Liability for Off site disposal will be excluded under the cost cap
 - √ Claims related to off site disposal will be a considered a third party claim.
 - √ Non owned disposal site coverage should be inexpensive.
- 3. Are we seeking regulatory closure (i.e., Response Complete) as the performance objective for some or all of the sites in the PWS? CCC insurance covers repairs required for on-going remedies (i.e., Remedies in Place) for the duration of the contract subject to the policy term; however, once the site achieves regulatory closure (i.e., no further action necessary), the policy terminates. An EIL/PLL policy will cover work required as a result of regulatory or other re-openers for the duration of the contract. The PBC Team needs to consider the likelihood that re-openers will occur (i.e., are there known emergent chemicals at the site?) and determine whether there is sufficient risk associated with the sites to warrant the cost of additional coverage.
- 4. Are we confident in our characterization of the sites included in the PWS? Much like question 1 in the CCC insurance section, this is highly subjective, but important for the PBC Team to consider. EIL/PLL provides broader coverage for unknowns at both known and unknown insured locations. For example, if during the course of excavating a TCE hot spot, the contractor encounters an unexpected contaminant (e.g., PCBs) and ends up "chasing" the contamination to locations that are clearly not within the scope of the original work plan, CCC may not cover the costs associated with the PCB effort. A EIL/PLL policy, however, would provide the coverage under its cleanup cost coverage. A simple way of thinking about the uncertainty covered under an EIL/PLL policy as

opposed to a CCC policy is that EIL/PLL covers losses for Bodily Injury, Property Damage and Cleanup from the insured locations which are not specifically tied to the work plan, while CCC policies covers unknown conditions or contaminants in a known site and within the insured work plan.

Other Considerations for Including El

Along with the general guidelines provided above for CCC and EIL/PLL policies, below are some additional considerations that can be taken into account when making the EI determination based on the type of activities likely to be performed under the PBC. The PBC Team should consider that it is possible to insure portions of the PBC rather than make an "all or nothing" determination.

Groundwater Plumes:

In general, when Remedy in Place (RIP) for groundwater is a performance objective of the PWS, EI should be considered; however, there are some exceptions. The PBC Team needs to take into consideration the percent of the work that is associated with groundwater as compared to other activities. If there is only one relatively small groundwater plume to be addressed, it is reasonable to still consider awarding a FFP contract because the groundwater site is not the primary activity, and RIP should be achievable on a FFP basis.

When making these recommendations, the PBC Team also needs to take into consideration the level of uncertainty associated with addressing the groundwater plumes. If, for example, the plume is well defined, FFP may be appropriate. This holds true particularly because the performance objective for groundwater is RIP, versus Response Complete (RC). If, however, the groundwater site is challenged with technical difficulties, such as karst, dense non-aqueous phase liquids (DNAPLs), unknown sources, mixed plumes, etc., purchasing EI may be considered a prudent safety net for the Army and the Contractor, as well as a fiscal risk tool to minimize contingency costs.

Because there are always uncertainties related to the nature and extent of a plume, the PBC Team should determine if there are focused activities that can be done to reduce the level of uncertainty prior to putting the site into firm fixed price procurement.

Soil Excavation:

In general, EI should be required when the PWS is limited to soil excavation (dig and haul) unless the volumes are bounded by spatial reference (e.g., the remedy specified in a Record of Decision is to excavate all soils to a depth of XX feet within fenced site boundary) versus a performance objective that is based on meeting certain concentrations. In many cases, soil and groundwater issues are linked in a single site (i.e., the soil contamination is considered a potential or actual source for groundwater contamination). In these cases, because we are insuring the groundwater, the soil site is also insured. Other conditions where EI may be appropriate include the existence of unknowns such as whether the waste is below the water table (and as such, different technologies may be required), or presence of certain contaminants (e.g., munitions and explosives of concern (MEC) or a question exists concerning hazardous versus non-hazardous disposal).

Because there is frequently uncertainty related to volume required for excavation or the fraction of the excavated volume that will require specialized treatment (e.g., RCRA Subtitle C disposal, i.e., waste must be disposed in a permitted RCRA hazardous waste landfill, or waste must meet Best Demonstrated Available Technology (BDAT) prior to disposal), the PBC Team may be able to identify specific data collection activities to reduce the uncertainty (e.g., bound the extent of the contamination); such an effort could reduce the overall insurance premium required for the effort. In some cases, a streamlined approach to remediation (i.e., excavation in conjunction with field analyses such as field XRF) is designed to move forward without complete quantification of the volume to be excavated. For those circumstances, the PBC team should look at the trade-off between using EI and placing a fixed unit price contract.

Landfills (installation of soil cover):

No CCC insurance should be purchased for this activity unless there is an extant soil cover but uncertainty as to how much of it meets requirements or if there is mature vegetation on the cover and uncertainty as to whether it can/must be removed to place soil. The Team may want to consider use of a PLL policy for this type of effort. PLL insurance would pay to fix a bad cap.

Landfills (installation of cap):

No CCC insurance should be purchased for this activity unless significant uncertainty remains with respect to the design. However, the Team may want to consider use of PLL coverage for this type of effort.

Ramp Down/Exit Strategies:

No CCC or PLL coverage should be purchased for this activity. However, the Team should make sure that CPL coverage is provided.

Long-term Management.

No CCC coverage should be purchased for this activity. If insurance is desired, PLL insurance is the coverage that would insure unanticipated costs during the long-term management period of the contract.

Remedial Action Operation:

No CCC insurance should be purchased for this activity unless there are uncertainties in composition of influents that could dramatically change treatment (e.g., dissolved iron content), or if RA(O) has no experiential base on which to base costs. PLL insurance could cover unanticipated costs. However PLL coverage is not available on total unknowns (no underwriting information); therefore, we want CPL coverage of at least \$5,000,000 included in the insurance specifications.

Project Management Plan, Other Direct Costs, and Other Documentation:

No EI should be purchased for these activities.

Finalizing the Decision and Reviewing the El Specifications, and Draft Policies

Once the PBC Team formulates the basis for the EI determination, the PWS and the EI discussion will need to be reviewed by USAEC Legal. Although we will be starting with the generic EI specifications, there may be situations that require site-specific additions to the specifications. As such, the general requirements and any unique aspects of the PWS should be discussed with the EI specialists prior to releasing the solicitation.

In addition, when the proposals are evaluated, an EI expert will review the EI quotes submitted to ensure consistency with the requirements of the PWS. This review is done concurrent to the review of the technical proposals and is generally done off-site.

Attachment A: Generic PBC Insurance Specifications

[Note: The following are generic specifications. Depending on the installation-specific circumstances and the contract being used, these specifications may require revision.]

5.6 Insurance Specifications

5.6.1 General Insurance Requirements

The Contractor will obtain or maintain insurance coverage over the course of this contract that meets the following objectives:

- 1. Provides Comprehensive General Liability (CGL), Automobile Liability including Hired and Non-Owned coverage with limits of liability not less than \$1,000,000 on each of these policies, these policies should name the Army as Additional Insured and provide a Waiver of Subrogation.
- 2. Provides an Excess Liability Insurance policy over CGL and Auto Liability with \$1,000,000 limits of liability.
- 3. Provides Professional Liability insurance without exclusions for pollution related losses with a limit of liability not less than \$5,000,000. This coverage may be incorporated in a package policy with the Contractors Pollution Liability (CPL) insurance detailed below.
- 4. Provides Workers Compensation and Employers Liability insurance on all of the contractors' and subcontractors' employees over the duration of this contract.

CPL insurance with limits of liability of at least \$5,000,000, that covers the contractor's liability for third party claims caused by pollution events arising out of covered operations performed by or on behalf of the insured at project sites. The CPL policy should provide for contractual liability coverage, name the Army as an Additional Insured and Wave Rights of Subrogation against the Army. The CPL policy should have an optional extended discovery clause of at least 2 years in length. If the coverage provided is part of a package policy with the Professional Liability insurance coverage required in this section, the limits of liability on the package should be \$10,000,000.

A Certificate of Insurance shall be furnished to the contracting officer (KO) on an annual basis documenting the above insurance coverage is in place.

Acceptable insurers will have an A.M. Best rating of at least A- (Excellent) and a Financial Size Category (FSC) of IX or better.

5.6.2 Environmental Insurance Requirements

The Contractor shall procure Environmental Insurance (EI) in the form of Remediation Stop Loss Insurance (Clean Cost Cap or CCC) and thereafter carry and maintain the EI coverage in full force and effect over the duration of the contract, to include options, at all sites identified in this PWS as requiring EI. The EI shall meet or exceed the following objectives:

1. **[Note: This may be changed based site-specific requirements.]**Provides coverage applicable to the sites, performance objectives, and performance standards identified in Table 1 of this PWS as requiring insurance, and confirms that

all the obligations assumed under this PWS are incorporated into the definition of the insured "remedial plan" as specified in the insurance endorsements.

- 2. Provides coverage at a minimum, equal to the Guarantee Limit of the contract, minus insurance, travel, and PMP costs and costs for any site locations excluded from the award or not requiring insurance. The combined coinsurance and buffer layer cannot exceed 20% of the Guarantee.
- Coverage to include a Waiver of Subrogation, as applicable, for claims associated
 with matters and scope items addressed in this PWS that the Contractor or
 insurance company may have against the Army.
- 4. Coverage provided from a carrier rated A.M. Best's A- (Excellent) and Financial Size Category (FSC) IX or better.
- 5. Requires that technical and schedule progress reports to be provided to the Army on the same schedule that they are provided to the insurance carrier.
- 6. Contains either no "War Exclusion", or a contains a limited war exclusion that excludes hostile or violent acts only, but does not exclude military training, logistical or administrative efforts in support of any ongoing war effort (e.g., storing or supplying or military training use of equipment) that could impact the progress of a cleanup.
- 7. Provides the Army the primary right to assign the policy to a replacement contractor acceptable to the insurance company should the Contractor default or otherwise be unable to meet the PWS requirements.

The Contractor must provide proof of insurability with the submitted proposal. Proof of insurability will be in the form of a draft policy specifying terms and conditions (e.g., all endorsements) in sufficient detail to allow evaluation of:

- The identity of the insurance companies offering to insure the contractor;
- The limits of liability for each coverage part:
- The premium for each policy or coverage part;
- The amount of the self-insured retention, buffer layer (if applicable), and /or co-insurance;
- The policy length (term) for each policy;
- The policy forms, and proposed endorsements;
- The insured scope of work or definition of the insured remedial plan:
- A list of the documents provided to the underwriter as part of the application for insurance:
- The name of the insurance broker and the full compensation of the insurance broker
 including any and all commissions, fees, incentive payments, reinsurance
 commissions or wholesale brokerage commissions earned by any firm within the
 insurance brokers economic family disclosed as a separate cost item, even if these
 costs are incorporated into the premiums of the insurance policies being provided;
- How, in the event of Contractor default, its provisions will ensure that this PWS is completed to the satisfaction of the Army.

Attachment 3.3: Environmental Insurance Guide USAEC Performance-Based Contracting Guidebook

- Any exclusions to be added to these polices by endorsement along with an explanation of the rationale behind attaching the exclusion; and
- Any deviations from these insurance specifications with explanation using a checklist
 as to why the specification was not met, or why the deficiency in question is not
 material to the CCC coverage to be provided.

Within ten (10) workdays of contract award, the Contractor shall provide a quote letter containing a policy with endorsements to KO/COR. The KO and COR shall have the right to review the quote letter to ensure consistency with the objectives as listed above. The Government reserves the right to withhold or adjust payment for the insurance policy if the final bound policy terms and conditions are changed from the draft policy terms and conditions presented in the Contractor's proposal submittals, or if the policy premium is different from the amount specified in the Contract Award. The Contractor is responsible for paying the costs associated with all insurance requirements, including but not limited to the self-insured retention and co-pays. Prospective Contractors should note that the Army will allow the first payment milestone to include necessary insurance costs (e.g., insurance premium).

A Certificate of Insurance shall be furnished to the contracting officer (KO) on an annual basis evidencing the above insurance coverage is bound.

If the determination is made to include Environmental Impairment Liability/Pollution Legal Liability (PLL/EIL), the following provision is included in the PWS:

- 1. Provides EIL/PLL with coverage for on and off-site, third-party Bodily Injury, Property Damage, Cleanup Costs and Defense Costs for the environmental liability incurred at the site under the indemnity provisions of this contract by the contractor. This policy should have a limit of liability of \$5,000,000, which cannot be combined with the Professional Liability or CPL policies. If this coverage element is provided as part of the CCC policy, the \$5,000,000 of limits for this coverage section shall be additive to the required limits on the stop loss/cost cap policy. This EIL/PLL coverage may exclude clean up obligations otherwise insured in the stop loss/cost cap policies and may also exclude contaminants outside the scope of services out side of the PWS.
- 2. Provides a Waiver of Subrogation for claims associated with matters and scope items addressed in this PWS that the Contractor or insurance company may have against the Army.
- 3. Names the Army as an Additional Insured.
- 4. Is Assignable to a replacement contractor mutually agreeable to the insurer.

Attachment 3.4: Template Candidate Evaluation Report USAEC Performance-Based Contracting Guidebook [INSTALLATION] IDATES1

1.0 Introduction

The U.S. Army Environmental Center (USAEC) conducted a Performance-Based Contracting (PBC) on-site evaluation of the open sites under the [INSTALLATION] Installation Restoration Program (IRP) and the Compliance-Related Cleanup (CC) program on [DATES]. The purpose of this review was to present and discuss the Army's PBC Initiative with the project stakeholders; the Installation, the [STATE REG], and the Environmental Protection Agency (EPA) Region [REGION]. Discussions focused on identification of current obstacles facing [INSTALLATION] in their quest to achieve environmental cleanup and/or regulatory closure of all of their sites. More specifically, the objectives of the review were to:

- 1) Provide an overview of PBC and the Army's FY06 goals to the project stakeholders;
- Provide the PBC team with a brief history of the Installation, an overview of the regulatory requirements and remediation activities performed at the Installation, and the current status of remediation activities;
- Address specific concerns raised by project stakeholders regarding appropriate involvement, Army decision making, and regulatory review required in the PBC planning and implementation process;
- 4) Determine the current action plans for open sites and potential paths forward to achieve Remedy in Place (RIP) or Response Complete (RC) at each site; and
- 5) Outline the future work planned and schedules for implementation.

During the review, discussions focused on all open Army Environmental Database-Restoration and Compliance Cleanup (AEDB-R & AEDB-CC) sites identified in the FY2006 [INSTALLATION] Installation Action Plans (IAPs) for both IRP and CC sites. In general, these discussions covered the planned path forward for each site, key uncertainties, and the execution status of each (i.e., where are they in the restoration process, what are the planned next steps, what work is under contract, what work is funded, how the existing contracts are managed/executed, etc.). A site tour of open project sites occurred on [DATE].

The results of this review, including a list of sites, are captured in the Summary Table below.

Attachment 3.4: Template Candidate Evaluation Report USAEC Performance-Based Contracting Guidebook [INSTALLATION] [DATES]

Installation	
Open, AEDB-R Remediation Sites	
Open, AEDB-R Other Sites	
Open, AEDB-CC Sites	
Remaining Scope and Likely Path Forward for Open Sites	
Outstanding Issues/Items of Interest	
Recommendation	
Decision	A subset of [INSTALLATION] sites will be selected for a PBC in FY05.

1.0 Introduction

The Contractor shall be responsible for fully executing the Guaranteed Fixed Price Remediation (GFPR) approach under a Performance-Based Contract (PBC), by: conducting required environmental restoration services for which the United States Department of the Army (the "Army") is statutorily responsible; addressing any and all unforeseen environmental, scheduling, and regulatory issues; and, assuming contractual liability and responsibility for the achievement of the performance objectives for the cleanup sites at the [Installation] (the "Installation") identified in this Performance Work Statement (PWS), including any sites with off-installation contamination for which the Army is responsible. Contractors should note that "Unforeseen environmental issues" include unknown and/or varied concentrations of contaminants at cleanup sites (off-installation areas included) identified in this PWS, but not unknown sites (e.g., sites not identified in this PWS).

[The following list of required capabilities will be installation-specific and may require revision of the "following note" and Section 5.11.] The Contractor must have the capability and experience to perform, or provide, a wide range of investigative, remedial design, remedial construction, and remediation services required for hazardous substance and waste sites, munitions and explosives of concern (MEC), and chemical warfare materiel (CWM). [The following note will be installation-specific] Contractors should note that under this PWS the Contractor will not perform MEC/CWM work; however, the Contractor should be familiar with and be able to recognize MEC/CWM and then notify the Army of potential condition. Work will include, for example, site investigation, site characterization, evaluation of remedial alternatives, remedial design, remedial construction, remediation of contaminated sites, remedial action (operations), and long-term management.

It is the Contractor's responsibility to comply with all applicable federal, state and local laws and regulations and to fulfill the performance objectives of this PWS in a manner that is consistent with any applicable orders or permits, all existing and future cleanup agreements or guidance for the Installation, and relevant Department of Defense (DoD) and Army policy, for the duration of the contract. It is the Contractor's responsibility to comply with all necessary insurance requirements, specifically set forth in Section 5.6.

[The following paragraph will be installation-specific.] The Contractor must perform all the necessary environmental remediation work as required to meet the performance objectives of this PWS. Remediation is being conducted pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), and National Oil and Hazardous Substances Contingency Plan (NCP) requirements, with regulatory coordination, as appropriate, of the [State Agency] and the United States Environmental Protection Agency (USEPA) Region [Number]. Additionally work may be conducted pursuant to Resource Conservation Recovery Act (RCRA) or other applicable authorities.

[The following paragraph will be installation-specific.] The Installation was proposed for the National Priorities List (NPL) in [Date] due to [Reason]. The Installation was placed on the NPL in [Date]. [Regulatory Agencies] and the Army signed a Federal Facilities Agreement (FFA) on [Date].

[The following paragraph will be included for installations with unregulated contaminants and CERCLA as the regulatory driver.] Certain pollutants or contaminants (P/C) may be an issue at sites covered by this PWS. Cleanup of P/C may be warranted if the P/C presents an imminent and substantial endangerment to the public health or welfare that results in an unacceptable risk. P/C, as defined in CERCLA, typically do not have a federally promulgated maximum contaminant limit (MCL). For any such P/C, or any other chemical, that does not have a federally promulgated MCL, but does have a finalized reference dose (RfD) or slope factor listed in USEPA's Integrated Risk Information System (IRIS) database, that RfD or slope factor should be incorporated in the NCP risk assessment process. However, funding will not be provided for responses that are not in full compliance with CERCLA, RCRA, the Defense Environmental Restoration Program (DERP), and DoD and Army policy. Additionally, state standards will only be analyzed through the CERCLA applicable or relevant and appropriate requirement (ARAR) process.

[The following paragraph will be included for installations with unregulated contaminants and RCRA as the regulatory driver.] Certain pollutants or contaminants (P/C) may be an issue at sites covered by this PWS. Cleanup of P/C may be warranted if the P/C presents an imminent and substantial endangerment to the public health or welfare that results in an unacceptable risk. P/C typically do not have a federally promulgated maximum contaminant limit (MCL). For any such P/C, or any other chemical, that does not have a federally promulgated MCL, but does have a finalized reference dose (RfD) or slope factor listed in USEPA's Integrated Risk Information System (IRIS) database, that RfD or slope factor should be incorporated in the risk assessment process. However, funding will not be provided for responses that are not in full compliance with CERCLA, RCRA, the Defense Environmental Restoration Program (DERP), and DoD and Army policy. Additionally, state standards will only be analyzed through the appropriate statutory analysis for applicable standards and requirements.

2.0 Performance Objectives and Standards

The performance objectives and standards for this PWS are outlined in Table 1. Contractors should note that the current status of the remediation efforts for each site can be found in Section 6.0: Installation and Site Information. Additional documentation is provided with the Request for Proposal (RFP) package.

[Note: Table 1 may be specified by media type (e.g., Soil sites should be able to go to RC; Groundwater is more likely to be RIP]

Table 1: Performance Requirements Summary.

	T .
Performance Objective	Performance Standards
Approved Project Management Plan (PMP) and Quality Assurance Surveillance Plan (QASP); • Draft within 30 days of Task Order award • Final within 30 days of receipt of COR comments on the draft PMP	Army approval through the COR.

Performance Objective	Performance Standards
Achieve Remedy in Place (RIP) at the following sites by [Date]: [List of RIP Sites]	Compliance with the FFA and associated schedule [if applicable]
Upon achievement of RIP, perform Remedial Action (Operations) (RA(O)) at the above sites for the duration of the contract or until achievement of Response Complete (RC), whichever comes first. Upon achievement of RC, perform any necessary Long-Term Management (LTM) at the above sites for the duration of the contract.	Army approval through the Contracting Officer's Representative (COR) and Regulator approval or concurrence (e.g., receipt of documentation confirming RIP; approval of annual RA(O) reports; approval of RA(O) exit or ramp down strategy).
RA(O) includes development and implementation of an exit or ramp-down strategy for RA(O) activities at each site.	
Perform RA(O) at the following sites for the duration of the contract or until achievement of RC, whichever comes first: [List of RA(O) Sites] RA(O) includes development and implementation of an exit or ramp-down strategy for RA(O) activities at each site.	Army approval through the COR and Regulator approval or concurrence (e.g., approval of annual RA(O) reports; approval of RA(O) exit or ramp down strategy).
Achieve RC at the following sites by [Date]: [List of RC Sites]	Compliance with FFA and associated schedule [if applicable]
Upon achievement of RC, perform any necessary Long-Term Management (LTM) at the above sites for the duration of the contract. LTM includes development and implementation of an exit or ramp-down strategy for LTM activities at each site.	Army approval through the COR and Regulator approval or concurrence (e.g., receipt of documentation confirming RC; approval of annual LTM reports; approval of LTM exit or ramp down strategy).
Perform any necessary LTM at the following sites for the duration of the contract: [List of LTM Sites] LTM includes development and implementation of an exit or ramp-down strategy for LTM activities at each site.	Army approval through the COR and Regulator approval or concurrence (e.g., approval of annual LTM reports; approval of LTM exit or ramp down strategy).
For all remedies, optimize capital and long-term costs.	Acceptance by the COR that the Contractor has demonstrated that the proposed remedy represents the lowest 30-year present worth cost to the Army, and is acceptable to the regulators.
Complete all CERCLA 121(c) reviews required for the sites identified above, for the duration of the contract. Correct any deficiencies noted in the CERCLA 121(c) reviews.	Army approval through the COR and Regulator approval or concurrence (e.g., formal documentation accepting the reviews and any corrections).
Consolidate CERCLA 121(c) reviews into a single installation-wide review conducted at the conclusion of the contract.	
[Additional installation-specific performance objectives, such as "Achieve levels of <2ppb RDX at the identified point of compliance."]	Army approval through the COR and Regulator approval or concurrence (e.g., documentation acknowledging that objective was achieved in a manner acceptable to Army and Regulators).

[INSTALLATION]

Contractors should note that Remedy in Place, Remedial Action (Operations), Response Complete, and Long-Term Management are terms used for Defense Environmental Restoration Program. These terms are defined in Attachment C.

RIP or RC will be attained upon the finalization of appropriate written documentation certifying that site remediation has met identified response objectives and no further action is necessary, subject to any requirement for RA(O) and/or LTM. Contractors should note that when RA(O), LTM and/or a CERCLA 121(c) review is necessary as a result of the Contractor's remediation activities at a site, the Contractor shall be responsible for the following:

- Performing the required RA(O) and/or LTM at that site for the duration of the contract.
- Conducting any CERCLA 121(c) reviews required at that site for the duration of the contract.
- GercLA 121(c) reviews conducted during the duration of the contract constitute a Government Inspection of Services. The Contractor will correct any problems and/or deficiencies noted by during RA(O), LTM or within a CERCLA 121(c) review. If reperformance is required to correct the deficiencies noted during RA(O), LTM or within a CERCLA 121(c) review, the Contractor may be required to modify the existing remedy, implement a contingent remedy, modify the monitoring parameters and/or frequency, or take other activities deemed necessary to correct the deficiencies. Corrective action must be certified and approved consistent with Section C.6.1 of the basic contract. If the Contractor is conducting RA(O) or LTM, or completing a CERCLA 121(c) review, for a remedy that they did not implement or modify (i.e., an on-going pump and treat system inherited as part of the PBC scope), correction of substantive remedy deficiencies noted during RA(O), LTM or within a CERCLA 121(c) review which may require modification of that remedy are considered outside the scope of this contract effort.

There may be multiple milestones and/or deliverables for each performance objective (see Section 3.4 and Section 7.0). Partial payments will be based on successful completion of the milestones. Final decisions regarding the adequacy of milestone and deliverable completion resides with [Installation]'s COR (see Section 5.1), with appropriate acceptance and approval of necessary site remediation documentation by regulators, consistent with applicable regulatory drivers listed in Section 1.0 of this PWS. For the duration of the contract, the Contractor shall remain responsible for correction of remedy deficiencies noted during RA(O), LTM, and CERCLA 121(c) reviews.

3.0 Project Management

The PBC approach requires careful coordination of project activities to ensure that all stakeholders are kept informed of the project status, existing or potential problems, and any changes required to prudently manage the project and meet the needs of the Installation's project stakeholders and decision-makers. The Contractor shall be responsible for the following project management activities:

3.1 Project Management Plan

The Contractor shall develop and maintain a detailed Project Management Plan (PMP). The PMP, based on the schedule prepared as part of the Contractor proposal, shall specify the schedule, technical approach, and resources required for the planning, execution, and completion of the performance objectives. The first draft of the PMP shall be due within thirty (30) days of

[INSTALLATION]

contract award. Elements of this draft PMP shall be part of the offeror's proposal submittal. The draft PMP and subsequent revisions shall be subject to Army review and approval, through the COR. The final PMP shall be due within 30 days of receipt of COR comments on the draft PMP. A payment milestone will be established for Army approval of the final PMP through the COR.

As part of the PMP, the Contractor shall develop and maintain a Resource-Loaded Schedule that fully supports the technical approach and outlines the due dates and cost expenditure percentages for all milestones and payable deliverables. A payment plan shall be included with the schedule that may allow for partial payments to the Contractor based on successful completion of interim milestones proposed by the Contractor. It is the Army's intent to make all payments after verification of progress in accordance with this schedule. Unless otherwise noted in Table 1, all performance objectives must be completed within the allowable contract period of performance, provided all contract options have been exercised. The Contractor shall need to take into account the existing or future schedules developed under the applicable regulatory drivers listed in Section 1.0 of this PWS. The Contractor shall also need to coordinate activities with the COR to ensure that the proposed project schedule does not conflict with other contractor activities on site, or interrupt Installation mission activities.

As part of the PMP, the Contractor shall identify and implement a means for providing project status reports to the COR. The PMP shall address the frequency and content of status reports.

The Contractor shall update the PMP to reflect progress towards achievement of the performance objectives and delineate proposed actions to accomplish future project milestones.

3.2 Additional Site Plans

Prior to beginning any field work the Contractor shall prepare any additional plans or documents (e.g., sampling and analysis plans, quality assurance project plan, waste minimization plans, health and safety plans) consistent with the applicable regulatory drivers listed in Section 1.0 of this PWS, and any other agreements, orders, or regulations that apply to the Installation and sites. These plans and documents shall be subject to Army review and approval, through the COR.

3.3 Quality Management

The Contractor must ensure that the quality of all work performed or produced under this contract meets Army approval, through the COR. Quality control/assurance plans must be prepared and approved by the COR prior to performance of physical work.

Since the technical approach for this PBC shall be developed by the Contractor, the Contractor shall also develop a draft Quality Assurance Surveillance Plan (QASP). The draft QASP shall be submitted with the proposal using the QASP template provided in Attachment D. The final QASP shall be submitted with the PMP. The QASP should highlight key quality control activities or events that the COR will use to determine when Army (COR or Contracting Officer (KO)) inspections can be conducted to assess progress toward milestones. Activities identified in the QASP should be appropriately coded in the project schedule to allow for planning of QA inspections. The Final QASP will be approved by the COR and provided to the Contractor within thirty (30) days of receiving the final approved PMP.

3.4 Milestone Presentations

Milestone presentations shall be made to the COR at the completion of each milestone below to provide analysis and lessons learned, and to present approaches for completion of future milestones. At the COR's request, the Contractor may also make milestone presentations to the other project stakeholders, consistent with the applicable regulatory drivers listed in Section 1.0 of this PWS, to show achievement of the performance objectives. This includes participation in annual Installation Action Plan (IAP) meetings, if requested by the COR.

The Contractor may propose a revision of the milestones below to reflect their PMP and provide for interim milestones. Interim milestones will only be accepted if they represent significant progress toward milestone completion, and completion of these interim steps can be measured and demonstrated. As noted in Section 2.0, partial payments will be tied to the successful completion of the following milestones or an interim milestone plan approved by the Army, through the COR. To that end, all proposed interim milestones should be associated with easily demonstrated metrics tied to performance measurements (e.g., final acceptance of a report rather than submission of a draft). All milestones must have a defined means for demonstrating completion in order to facilitate certification and approval (see Section 5.1).

Major Milestones

- Approval of the Project Management Plan
- Achievement of (acceptance/approval of) RIP at [Site] by [Date]
- Approval of annual RA(O) reports
- Approval of an exit or ramp-down strategy for RA(O)
- Achievement of (acceptance/approval of) RC at [Site] by [Date]
- Approval of annual LTM reports
- Approval of an exit or ramp-down strategy for LTM
- Approval of the CERCLA 121(c) review(s)
- Successful correction of deficiencies noted in the CERCLA 121(c) review(s)

3.5 Environmental Requirements

The Contractor shall identify: applicable Federal, State and Local laws and regulations; applicable Installation-specific orders, agreements, or rules; and perform its work in accordance with said authorities. The Contractor shall ensure that all activities performed by its personnel, subcontractors and suppliers are executed in accordance with said authorities. Any incident of noncompliance noted by the Contractor shall immediately be brought to the attention of the COR and Installation [or "facility operator" if applicable] telephonically and then by written notice. Nothing in this contract shall relieve the Contractor of its responsibility to comply with applicable laws and regulations. The Contractor shall obtain all permits, licenses, approvals, and/or certificates required or necessary to accomplish the work. When the work to be performed requires facility clearances, such as digging or drilling permits, the Contractor shall obtain such clearances and/or permits, with the assistance of the installation point of contact, prior to any drilling or excavating operations. The Contractor shall coordinate all such work with Installation maintenance personnel prior to performing work. Contractors on environmental sites are required to perform their own utility checks based on Installation-supplied utility maps.

The Contractor shall comply with all Installation- or site-specific time and procedural requirements (federal, state, and local) described in the permits obtained. The Army technical experts will also independently review Contractor work to ensure compliance with all applicable requirements.

The following paragraph will be installation-specific.] The Army has/will establish/ed a Standard Operating Procedure and a Geographic Information System (GIS)-based tracking system to ensure the Land Use Controls (LUCs) are enforced. The LUCs will/have been incorporated into the post-wide Master Plan and compliance with LUCs will be reported in the Monitoring Reports for each site. The LUC policy applies to all units and activities, Military and Civilian Support Activities, tenant organizations and agencies and Government and Civilian Contractors. Compliance with the LUC policy is required in all RA(O), LTM and CERCLA 121(c) review activities.

3.5.1 Protection of Property

The Contractor shall be responsible for any damage caused to property of the United States (Federal property) by the activities of the Contractor under this contract and shall exercise due diligence in the protection of all property located on the premises against fire or damage from any and all other causes. Any property of the United States damaged or destroyed by the Contractor incident to the exercise of the privileges herein granted shall be promptly repaired or replaced by the Contractor to a condition satisfactory to the COR or reimbursement is made by the Contractor sufficient to restore or replace the property to a condition satisfactory to the COR in accordance with FAR Clause 52.245-2.

3.6 Health and Safety Requirements

The Contractor shall implement a written Safety and Health Program compliant with federal, state, and local laws and regulations and approved by the KO. The Contractor shall ensure that its subcontractors, suppliers and support personnel comply with the approved Site Safety and Health Plan (SSHP). The Army reserves the right to stop work under this contract for any violations of the SSHP at no additional cost to the Army. Once the Army verifies through the COR that the violation has been corrected, the Contractor shall be able to continue work. As a minimum, the SSHP shall contain the following elements: site description and contaminant characterization, safety and health hazard(s) assessment and risk analysis, safety and health staff organization and responsibilities, site specific training and medical surveillance parameters, personal protective equipment (PPE) and decontamination facilities and procedures to be used, monitoring and sampling required, safety and health work precautions and procedures, site control measures, on-site first aid and emergency equipment, emergency response plans and contingency procedures (on-site and off-site), logs, reports, and record keeping.

3.7 Quality Control Testing

Chemical Quality Control shall be provided whenever sampling or analysis for chemical constituents is required in order to achieve milestones. Quality control for traditional soils or geotechnical testing shall also be included. The laboratory(ies) to be used by the Contractor shall be National Environmental Laboratory Accreditation Program (NELAP) certified or equivalent. The Contractor may establish an on-site testing laboratory at the project site if determined

necessary by the Contractor. However, on-site testing shall meet the requirements of USEPA, specific state regulator requirements, and all requirements of the DoD Quality Systems Manual, Version 2.

3.8 Project Repository and Administrative Record

The Contractor shall update at least monthly a multimedia (i.e., both paper and electronic format) project repository of all project-related information to ensure that pertinent documentation and data are available for project reviews, and to provide a clear record of the PBC approach to support final decisions and remediation completion. This repository is the property of the Army and available to the Army upon request by the COR or KO. A project repository is currently maintained at [Location].

"Project-related information" includes all previous environmental restoration documentation of a technical nature developed by the Army and previous Army contractors for the sites specified in this PWS, and all the documentation developed by the Contractor in order to achieve the performance objectives specified in this PWS. Documents generated prior to the PBC are not expected to be stored in electronic format; however, all documents generated by the Contractor shall be maintained in multi-media form.

The Contractor shall also update the repositories for the Administrative Record for CERCLA activities established at [Location], as needed. The project repository and Administrative Record shall be updated by the Contractor, and made available to the public, for the duration of the contract.

3.9 Army Environmental Database and Environmental Restoration Information System

Once a site identified in this PWS has achieved Response Complete (i.e., appropriate documentation is finalized), the Contractor shall be responsible for providing the COR with the data and documentation necessary for the closeout of each site from the Army Environmental Database - Restoration Module (AEDB-R). In addition, the Contractor shall electronically submit all generated analytical data into the Environmental Restoration Information System (ERIS). Information regarding ERIS is available online at http://aec.army.mil/usaec/reporting/eris00.html. The Army, through the COR, will provide data specifications for AEDB-R and ERIS to the Contractor. The Contractor shall comply with all applicable requirements for data validation and submission.

3.10 Regulatory Involvement

All regulatory coordination shall be approved by the Army through the COR. The Contractor shall provide the necessary support to initiate, schedule, and address all regulatory aspects of the project (e.g., organizing discussions with regulators concerning site response objectives and completion requirements, obtaining regulator comments on site documents and appropriately addressing them, and obtaining written documentation of remediation completion from the regulators for all of the sites identified in this PWS). The COR, or designee, will attend and represent the Army at all meetings with the regulators. With approval of the COR, the contractor may also informally discuss remediation issues with regulators and provide an after-action report

back to the COR. The Army will be the signature authority for all regulatory agreements and remediation documentation.

3.11 Public Involvement

All public participation coordination shall be approved by the Army through the COR. The Contractor shall provide the necessary support to initiate, schedule, and address all public participation aspects of the project (e.g., preparation of briefings, presentations, fact sheets, newsletters, articles/public notices to news media, and notifications to Restoration Advisory Board (RAB) members). The Contractor shall be responsible for requesting and addressing all public comments consistent with the applicable regulatory drivers listed in Section 1.0 of this PWS. The COR, or designee, will attend and represent the Army at all meetings with the public.

[The following paragraph will be installation-specific.] Contractors should note that the Installation has an active RAB and detailed information concerning the RAB's organization and activities will be provided to the Contractor. Activities required to support the RAB meetings are included in this effort. The Contractor shall be responsible for the minutes of all RAB meetings and shall submit these minutes to the COR for approval. The Contractor shall also secure a location for each scheduled meeting and shall provide all equipment to support these meetings.

3.12 Project Stakeholders

For the purposes of this PWS, project stakeholders include the Army, [Regulatory Agencies], and the RAB[If applicable]. Required level of involvement may differ from site to site and the Contractor shall be responsible for obtaining comments with appropriate approval or concurrence on project deliverables consistent with applicable regulatory drivers and agreements for each site.

3.13 Deliverable Requirements

All documents must be produced with at least draft, draft-final, and final versions. With Army concurrence, the Contractor may coordinate with appropriate regulatory agencies to determine if fewer versions of each deliverable are sufficient for review. The Army, through the COR, will receive initial draft documents and will provide comments to the Contractor within five (5) [confirm duration with installation] business days. Once initial comments are addressed, the Army will review draft documents before submission to appropriate regulatory agencies. The Contractor shall ensure that review periods are consistent with the applicable regulatory drivers noted in Section 1.0 of this PWS. All documents shall be identified as draft until completion of stakeholder coordination, when they will be signed and finalized. One copy of the final document shall be placed in both the project repository and Administrative Record (for CERCLA documents).

4.0 Expertise and Necessary Personnel

The Contractor shall provide the necessary personnel and equipment to successfully execute this PWS. The Contractor is responsible for determining the requirements for licensed professionals and certifications.

The Contractor shall furnish all plant, labor, materials and equipment necessary to meet the performance objectives. The Contractor shall provide personnel trained as required by the Occupational Safety and Health Administration (OSHA) and all other applicable federal and state regulations. The Contractor shall provide all support activities necessary to ensure the safe and effective accomplishment of all work. For all work performed under this contract, the Contractor shall also develop and implement quality control measures consistent with all applicable federal and state regulatory requirements and standards.

5.0 Additional Requirements

5.1 Certification and Approval of Project Milestones and Deliverables

The COR will be responsible for contract management, inspection, oversight, review, and approval activities. Certification and approval of project milestones by the COR is necessary before distribution of partial payments. Final acceptance of milestone completion shall include appropriate acceptance of site remediation documentation by regulators. For the duration of the contract, the Contractor shall remain responsible for correction of remedy deficiencies noted during RA(O), LTM, and CERCLA 121(c) reviews.

Certification by the Army is contingent upon the Contractor performing in accordance with the terms and conditions of the contract, this PWS, and all amendments/options.

Representatives of the U.S. Army Environmental Center (USAEC) and the Contractor shall meet with the COR at a site and time designated by the COR after receipt of each status report to:

- Formally review the quantity and quality of services;
- Inspect work for compliance with this PWS, the associated Contractor's final proposal, and project documentation;
- · Accept or reject milestones and deliverables completed since the previous review; and
- Prepare, approve and submit DD Form 250 "Material Inspection and Receiving Report" for partial payments in accordance with milestone completions and approvals at the USAEC level.

5.2 Army Furnished Resources

The Army, through the COR, shall make available the following resources to the Contractor:

- Records, reports, data, analyses, and information, in their current format (e.g., paper copy, electronic, tape, disks, CDs), to facilitate development of an accurate assessment of current, former, and historical site activities and operations; waste generation and contaminant characteristics; parameters of interest; and site environmental conditions.
- Access to personnel to conduct interviews on Installation operations and activities.
- Access to DoD and Army policy and guidance documents.
- All Army owned property used for remediation purposes must be maintained by the Contractor in accordance with applicable maintenance requirements, and may not be replaced by the Army should new equipment be required.
- [Others to be determined, depending on the nature of the contract mechanism used.]

5.3 Contractor Furnished Resources

The Contractor shall be responsible for the following:

- Coordination with the Army/COR and the Installation for access to the Installation, to
 execute this PWS and comply with the procedures described during the Contractors' meeting
 at the Installation.
- Coordination with the Army/COR and the Installation in order to gain access to available
 infrastructure (e.g., buildings, roadways, waste management units, other Installation
 facilities) and utilities (e.g., electric power and telephone lines, natural gas and water supply
 distribution pipelines, and wastewater discharge conveyances), to execute this PWS.
- [The following bullet will be installation-specific.] The provision and cost of the utilities associated with implementation of remedies, including installation of individual meters for necessary utilities.
- All waste generated under this contract shall be the responsibility of the Contractor.
- Any other necessary resources needed to achieve the performance objectives.

5.4 Government Rights

The Army has unlimited rights to all documents/material produced under this contract. All documents and materials, to include the source codes of any software, produced under this contract shall be Army owned and are the property of the Army with all rights and privileges of ownership/copyright belonging exclusively to the Army. These documents and materials cannot be used or sold by the Contractor without written permission from the KO. All materials supplied to the Army shall be the sole property of the Army and cannot be used for any other purpose. This right does not abrogate any other Army rights under the applicable Data Rights clause(s).

5.5 Contractor's Guarantee

For the purposes of this PWS, the following definitions apply: [Note: The following definitions may be changed to remove site-specific guarantees for RA(O)/LTM activities.]

- "Project Price" for each site identified in this PWS will be equal to the approved proposed price for achieving RIP and/or RC and performing RA(O) and/or LTM. The Project Price payment will be tied to one or more project milestones.
- "Guarantee Limit" is equal to at least twice the sum of all of the Project Prices for the sites identified in this PWS.
- "Contractor's Project Costs" are defined as those costs incurred by the Contractor (including
 costs covered by insurance) in executing the work required to achieve RIP and/or RC and
 perform RA(O) and/or LTM, for the sites identified in this PWS.

The Contractor guarantees to complete and meet all of the performance objectives, subject to the Guarantee Limit. This guarantee by the Contractor shall not exceed the Guarantee Limit. In the event the Contractor's Project Costs reach 80% of the Guarantee Limit, the KO, COR and the Contractor shall enter into discussions to determine if completion can be accomplished within the Guarantee Limit. If it is determined that completion will not be accomplished within the Guarantee Limit, work on the contract will stop when 100% of the Guarantee Limit is reached; unless and until there is agreement by modification to the contract to continue and USAEC has committed adequate funding.

5.6 Insurance Specifications

The Contractor shall procure Environmental Insurance (EI) in the form of Remediation Stop Loss Insurance (Clean Cost Cap or CCC) and thereafter carry and maintain the EI coverage in full force and effect over the duration of the contract, to include options, at all sites identified in this PWS as requiring EI. The EI shall meet or exceed the following objectives:

- 1. [Note: This may be changed based site-specific requirements.] Provides coverage applicable to the sites, performance objectives, and performance standards identified in Table 1 of this PWS as requiring insurance, and confirms that all the obligations assumed under this PWS are incorporated into the definition of the insured "remedial plan" as specified in the insurance endorsements.
- 2. Provides coverage at a minimum, equal to the Guarantee Limit of the contract, minus insurance, travel, and PMP costs and costs for any site locations excluded from the award or not requiring insurance.
- Coverage to include a Waiver of Subrogation, as applicable, for claims associated with matters and scope items addressed in this PWS that the Contractor or insurance company may have against the Army.
- 4. Coverage provided from a carrier rated A.M. Best's A- (Excellent) and Financial Size Category (FSC) IX or better.
- 5. Requires that technical and schedule progress reports to be provided to the Army on the same schedule that they are provided to the insurance carrier.
- 6. Contains no "War Exclusion" or contains a limited war exclusion that excludes cleanup costs caused solely by a hostile or violent act of war after the inception date.
- 7. Provides the Army the primary right to assign the policy to a replacement contractor acceptable to the insurance company should the Contractor default or otherwise be unable to meet the PWS requirements.

The Contractor must provide proof of insurability with the submitted proposal. Proof of insurability will be in the form of a draft policy specifying terms and conditions (e.g., all endorsements) in sufficient detail to allow evaluation of:

- The identity of the insurance companies offering to insure the contractor;
- The limits of liability for each coverage part;
- The premium for each policy or coverage part;
- The amount of the self-insured retention, buffer layer (if applicable), and /or co-insurance;
- The policy length (term) for each policy;
- The policy forms, and proposed endorsements;
- The insured scope of work or definition of the insured remedial plan;
- A list of the documents provided to the underwriter as part of the application for insurance;
- The name of the insurance broker and the full compensation of the insurance broker
 including any and all commissions, fees, incentive payments, reinsurance commissions or
 wholesale brokerage commissions earned by any firm within the insurance brokers
 economic family disclosed as a separate cost item, even if these costs are incorporated
 into the premiums of the insurance policies being provided;
- How, in the event of Contractor default, its provisions will ensure that this PWS is completed to the satisfaction of the Army.

- Any exclusions to be added to these polices by endorsement along with an explanation of the rationale behind attaching the exclusion; and
- Any deviations from these insurance specifications with explanation using a checklist as to why the specification was not met, or why the deficiency in question is not material to the CCC coverage to be provided.

Within ten (10) workdays of contract award, the Contractor shall provide a quote letter containing a policy with endorsements to KO/COR. The KO and COR shall have the right to review the quote letter to ensure consistency with the objectives as listed above. The Government reserves the right to withhold or adjust payment for the insurance policy if the final bound policy terms and conditions are changed from the draft policy terms and conditions presented in the Contractor's proposal submittals, or if the policy premium is different from the amount specified in the Contract Award. The Contractor is responsible for paying the costs associated with all insurance requirements, including but not limited to the self-insured retention and co-pays. Contractors should note that the Army will allow the first payment milestone to include necessary insurance costs (e.g., insurance premium).

A Certificate of Insurance shall be furnished to the contracting officer (KO) on an annual basis evidencing the above insurance coverage is bound.

5.7 Place of Performance

Work will be performed at the Installation and off-site Contractor offices as agreed to by both parties for proper performance of this task.

5.8 Privacy and Security

In order to ensure the security and orderly running of the Installation, any contractor personnel who wish to gain access to the Installation shall follow procedures established by the Installation. Due to security restrictions, details of these and other security procedures will be provided at a later date to the Contractor. However, the Contractor should account for potential delays due to DoD security requirements in its pricing.

[include narrative explanation of installation access/security requirements or provide policy/procedure references and post documents on the webpage]

5.9 Staffing

The Contractor shall notify the COR of any changes in key personnel. The change of key personnel is subject to approval by the KO, although such approval will not be unreasonably withheld provided replacement personnel are of the same quality as originally proposed.

5.10 Stop Work

The Contractor, authorized Installation personnel, and the COR have the responsibility to stop work immediately if the work is considered to be a serious threat to the safety or health of workers, other personnel, or to the environment. Authorized Installation personnel include Installation safety officers, Environmental Division personnel, and command personnel with

responsibility for overall Installation operations. When work is stopped due to a hazard/threat to worker safety, health, or the environment, the situation and resolution must be documented and submitted to the KO. Work must be stopped whenever chemical and biological warfare agents are encountered.

5.11 Environmental Responsibility Considerations

- The Army will retain responsibility for any assessed natural resource damages that are attributed to historic releases of hazardous substances (prior to contract with contractor) and any injuries that are necessary and incidental to the reasonable implementation of a selected response or remedial action. The Contractor shall be responsible for any/all additional natural resource injuries and associated Natural Resource Damages claims brought as a result of its actions (e.g. release of hazardous substance or unreasonable disturbance of natural resources as a result of construction activities).
- [The following bullet will be installation-specific.] The Army will retain all responsibility for third party liability for CWM, MEC, or radiological material that are either targeted for or may be discovered during the course of remediation.
- Response cost claims, property damage and personal injury claims brought due to
 contamination and hazardous substance releases that have occurred historically (prior to
 contract with Contractor) and are not due to Contractor remediation activities are excluded
 from Contractor responsibility. The Contractor shall be responsible for and indemnify the
 Army for:
 - Any response cost claims for any environmental remediation services which the Contractor has assumed responsibility for under this PWS;
 - All costs associated with correction of a failure of any remedy implemented or
 operated and maintained by the Contractor to the extent such failure was caused by
 the willful or negligent acts or omissions of the Contractor in the course of
 performing the environmental services;
 - All personal injury or property damage claims to the extent caused by the acts or omissions of the Contractor in the course of performing the environmental services;
 - All natural resource damages pursuant to 42 U.S.C. Section 9607(a)(4)(C), to the extent that such damages were caused or contributed to by the actions of the Contractor or its successors in interest; and
 - All costs associated with or arising from any negligent acts or omissions or willful
 misconduct of the Contractor in the course of performing the environmental services
 or implementing remedial actions.

5.12 Organizational Conflicts of Interest

5.12.1 Disclosure. The Contractor shall provide a disclosure statement with its task order proposal, which concisely describes all relevant facts concerning any past or present organizational conflicts of interest relating to the work in each task order. In the same statement, the Contractor shall provide the information required in the following paragraph to assure the Government that the conflicts of interest have been mitigated and/or neutralized to the maximum extent possible. If a conflict of interest is discovered after task order award, the Contracting Officer will make a decision whether to terminate or rescind the task order and/or contract at that time.

5.12.2 Potential Conflicts of Interest. This request for proposals is open to any offeror to compete as a prime contractor, subcontractor or in any teaming arrangement. In order to avoid any organizational conflicts of interest, or even the appearance of any organizational conflicts of interest, any contractor performing environmental services work at the follow-on installation(s) under each task order will need to avoid, neutralize and/or mitigate -- prior to task order award - significant potential conflicts of interest that may prejudice effective competition. The Contracting Officer has determined that at a minimum contractors currently performing work on the identified installation(s) under each task order must ensure that all data pertaining to contamination at the sites compiled by or in the possession of such contractors shall be made available to all potential contractors in a timely fashion to the maximum extent possible by providing such data in to a data depository.

6.0 Installation and Site Information

This section is intended to provide the Contractor with general site background information to assist in the Contractor's identification of the specific sites and corresponding documentation/existing reports. The Army believes the information presented below is accurate. However, if there is a conflict between this information and other site documentation (the existing reports), the Contractor is solely responsible for reviewing all available information and forming their independent, professional conclusions/interpretation of site conditions and requirements to meet the objectives of this PWS. The following information is not intended as a substitute for complete analysis of technical data available. Nor is it intended to be a guide on how the Contractor should address achievement of the performance objectives/standards.

6.1 Installation Setting and Status

[Installation-specific background information inserted here.]

The following provides a description of the current site status for each of the sites identified in this PWS. These descriptions are based on the best information at the disposal of the Army, site conditions may have changed, and it is the responsibility of potential Contractors to attend the site visit, research, investigate, and reach their own conclusions regarding site conditions.

6.2 [Site Name]

Site Information

[Site-specific information inserted here.]

Most Recent Documentation

• [List of most recent documentation for site inserted here.]

7.0 Project Deliverables

Contractors should note:

- This project deliverables list is subject to change based on an alternative deliverables list proposed by the Contractor and approved by the Army through the COR.
- As noted in Section 3.13, all documents must be produced with at least draft, draft-final, and final versions. This requirement is subject to change based on Contractor negotiations with the Army and regulators and approved by the COR/KO.

Table 2: Proposed Project Deliverables.

Deliverable Number	Deliverable Name	
1	Final Project Management Plan	
2	Additional Site Plans	
3	Status Reports	
4	Milestone Presentations	
5	[Site] Documents (CERCLA)	
6	[Site] Documents (Non-CERCLA)	
7	Annual RA(O) Report(s)	
8	RA(O) Exit/Ramp-Down Strategy Document(s)	
9	Annual LTM Report(s)	
10	LTM Exit/Ramp-Down Strategy Document(s)	
11	CERCLA 121(c) Review Documents	
12	CERCLA 121(c) Review Correction Documents	

Attachment A: Reference Documents

Contractors should note:

- These documents are available on [reference CD or website].
- The Army believes this documentation represents the most recent and appropriate documentation available for the Installation and sites identified in this PWS.
- Additional documentation is available through [other sources]. Specific documents may be made available following a request, if the documentation can be distributed in a timely manner. Electronic format is not guaranteed.

Table 4: Available Reference Documents.

Title	Author	Date
[Insert list of all available documents]		

[INSTALLATION]

Attachment B: List of Acronyms

AEDB-R Army Environmental Database - Restoration Module ARAR Applicable or Relevant and Appropriate Requirement

CAIS Chemical Agent Identification Sets

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

COR Contracting Officer's Representative

CWM Chemical Warfare Materiel

DERP Defense Environmental Restoration Program

DMM Discarded Military Munitions
DoD Department of Defense

ERIS Environmental Restoration Information System

FAR Federal Acquisition Regulation FFA Federal Facility Agreement

GFPR Guaranteed Fixed Price Remediation
GIS Geographic Information System

IAP Installation Action Plan IC Institutional Control

IRIS Integrated Risk Information System

KO Contracting Officer
LTM Long-Term Management
MCL Maximum Contaminant Level
MEC Munitions and Explosives of Concern

NCP National Oil and Hazardous Substances Contingency Plan NELAP National Environmental Laboratory Accreditation Program

NPL National Priorities List

OSHA Occupational Safety and Health Administration PBC Performance-Based Contract/Contracting

PMP Project Management Plan
PPE Personal Protective Equipment
PLL Pollution Legal Liability
PWS Performance Work Statement

QA Quality Assurance

QASP Quality Assurance Surveillance Plan RAB Restoration Advisory Board

RA(O) Remedial Action (Operations)

RC Response Complete

RCRA Resource Conservation and Recovery Act

RDX Royal Demolition eXplosive

RfD Reference Dose
RFQ Request for Quotation
RIP Remedy In Place
ROD Record of Decision

SARA Superfund Amendments and Reauthorization Act

SSHP Site Safety and Health Plan

TNT Trinitrotoluene

USAEC United States Army Environmental Center USEPA United States Environmental Protection Agency

UST Underground Storage Tank
UXO Unexploded Ordnance

Attachment C: Definitions

Chemical Warfare Materiel (CWM): An item configured as a munitions containing a chemical substance that is intended to kill, seriously injure, or incapacitate a person through its physiological effects. CWM also includes V- and G- services nerve agent, H-series blister agent, and lewisite in other than munitions configurations. Due to their hazards, prevalence, and military-unique application, Chemical Agent Identification Sets (CAIS) are also considered CWM. CWM does not include: riot control agency, chemical herbicides, smoke and flame producing items, or soil, water, debris, or other media contaminated with chemical agent.

Contractor's Project Costs: [Note: The following definitions may be changed to remove site-specific guarantees for RA(O)/LTM activities.] Costs incurred by the Contractor in executing the work required to achieve RIP and/or RC, and perform RA(O) and/or LTM (if required), for the sites identified in this PWS.

Deliverables: Documentation or data that support the completion of milestones or achievement of the performance objectives identified in this PWS.

Duration of the contract: The total period of performance to include option periods, if exercised.

Guarantee Limit: At least twice the sum of all of the Project Prices for the sites identified in this PWS.

Long-Term Management (LTM): The remedial phase including maintenance, monitoring, record keeping, remedy reviews, etc. initiated after response (removal or remedial) objectives have been met (i.e., after Response Complete).

Milestones: Significant events or activities that occur in the course of the Contractor achieving the performance objectives identified in this PWS.

Munitions and Explosives of Concern (MEC): This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks, means Unexploded Ordnance (UXO), as defined in 10 U.S.C. 2710 (e) (9); Discarded Military Munitions (DMM), as defined in 10 U.S.C. 2710 (e) (2); or Explosive munitions constituents (e.g., Trinitrotoluene (TNT), Royal Demolition eXplosive (RDX)) present in high enough concentrations to pose an explosive hazard.

PMP Documents: The original PMP (including project schedule), revisions, and status reports.

Project Documents (CERCLA): Documentation and data required by CERCLA remediation and RA(O) and/or LTM activities. These documents include the additional site plans referenced in Section 3.2.

[If applicable] Project Documents (UST, RCRA): Documentation and data required by underground storage tank (UST) or RCRA remediation and RA(O) and/or LTM activities.

Project Price: [Note: The following definitions may be changed to remove site-specific guarantees for RA(O)/LTM activities.] The approved proposed price for achieving RIP and/or Template revised as of April 11, 2006

RC, and perform RA(O) and/or LTM (if required), the payment of which will be tied to one or more project milestones.

Project-related information: All previous environmental restoration documentation of a technical nature developed by the Army and previous Army contractors and subcontractors during their work at the sites specified in this PWS, and all the documentation developed by the Contractor in order to achieve the performance objectives specified in this PWS.

Remedial Action (Operations) (RA(O)): The remedial phase during which the remedy is in place and operating to achieve the cleanup objective identified in the Record of Decision (ROD) or other formal decision document. Any system operation (long-term operations) or monitoring (long-term monitoring) requirements during this time are considered RA(O).

Remedy In Place (RIP): A final remedial action has been constructed and implemented and is operating as planned in the remedial design. An example of a remedy in place is a pump-and-treat system that is installed, is operating as designed, and will continue to operate until cleanup levels have been attained. Because operation of the remedy is ongoing, the site cannot be considered Response Complete.

Resource-loaded Schedule: A schedule of due dates and cost expenditure percentages for all milestones and payable deliverables.

Response Complete (RC): The remedy is in place and required RA(O) have been completed. If there is no RA(O) phase, then the remedial action—construction end date will also be the RC date. If no remedial action is required at a site (based on agreement with the Army and appropriate regulators), documentation of "No Further Action" will constitute Response Complete. Consistent with CERCLA, the Defense Environmental Restoration Program, and applicable Executive Orders and regulations, environmental response activities under the Installation Restoration program categories shall be considered "response complete" when all the response objectives identified in an appropriately signed ROD or other formal decision document have been achieved and documented.

- If environmental restoration activities allow for unrestricted use of the property, response complete is when there is verification of the achievement of the response objectives detailed in the ROD or other formal decision document.
- If environmental restoration activities do not allow for unrestricted use of the property, response complete occurs when: 1) There is verification of the achievement of the response objectives detailed in the ROD or other formal decision document; and 2) At least one subsequent review to ensure that the response action has remained effective and continues to be protective of human health and the environment as defined by the response objectives detailed in the ROD or other formal decision document has occurred; and 3) At least five years have elapsed.

[INSTALLATION]

Attachment D: Quality Assurance and Surveillance Plan (QASP) Template

1.0 Overview

This performance-based Quality Assurance Surveillance Plan (QASP) sets forth the procedures and guidance that the Contract Officer Representative (COR) will use in evaluating the technical performance of the Contractor in accordance with the terms and conditions of the performance work statement (PWS). The QASP objective is to define Government procedures to be used to verify that appropriate performance and quality assurance methods are used in the management of this performance-based contract. The purpose of the QASP is to assure that performance of specific activities and completion of milestones are accomplished in accordance with all requirements set forth in the PWS.

This QASP describes the mechanism for documenting noteworthy accomplishments or discrepancies for work performed by the Contractor. Information generated from COR's surveillance activities will directly feed into performance discussions with the Contractor. The intent is to ensure that the Contractor performs in accordance with performance metrics set forth in the contract documents, the Army receives the quality of services called for in the contract, the Army only pays for the acceptable level of services received.

The QASP details how and when the COR will monitor, evaluate, and document Contractor performance on the PWS. The QASP is intended to accomplish the following:

- 1. Define the role and responsibilities of participating Army officials.
- 2. Define the key milestones/deliverables that will be assessed.
- 3. Define acceptable, superior, and unacceptable performance standards for key milestones/deliverables.
- 4. Describe the surveillance methodology that will be employed by the Army in assessing the Contractor's performance.
- 5. Describe the surveillance documentation process and provide copies of the form that the Army will use in evaluating the Contractor's performance.
- 6. Outline payment and corrective action procedures.

This QASP will be revised and finalized by the COR and Contractor upon completion of the Project Management Plan (PMP).

2.0 Roles and Responsibilities of Army Officials

The Contracting Officer's Representative (COR) is responsible for technical administration of the project and assures proper Army surveillance of the Contractor's performance. The COR is responsible for monitoring, assessing, recording, and reporting on the technical performance of the Contractor on a day-to-day basis.

The Contracting Officer (KO) has overall responsibility for overseeing the Contractor's performance. The KO is responsible for the day-to-day monitoring of the Contractor's performance in the areas of contract compliance, and contract administration; reviewing the COR's assessment of the Contractor's performance; and resolving all differences between the COR's assessment and the Contractor's assessment of performance. It is the KO that assures

the Contractor receives impartial, fair, and equitable treatment under the contract. The KO is ultimately responsible for the final determination of the adequacy of the Contractor's performance.

The COR and KO may call upon the technical expertise of other Army officials and subject matter experts (SME) as required. These Army officials/SMEs may be called upon to review technical documents and products generated by the Contractor. Contracting Agency representatives will also conduct review of contract documentation such as invoices, monthly status reports, and work plans.

3.0 Key Milestones/Deliverables to be Assessed

At a minimum, the following milestones and associated deliverables will be evaluated in accordance with this QASP (Based on milestones/deliverables in the PWS):

- Completion of the final Project Management Plan (PMP)
- Achievement of performance objective at each site specified in the PWS
- Completion of annual monitoring report(s)
- Completion of the final exit or ramp-down strategy for LTM/LTO
- Completion of final remedy review(s)
- Correction of deficiencies noted in the remedy review(s)
- Approved interim milestones identified in the final PMP

Additionally, the Army will evaluate performance on the key quality control activities and events specified by the Contractor through their Quality Assurance (QA) strategy (see PWS Section 3.3: Quality Management).

4.0 Performance Standards for Key Milestones/Deliverables

Since cost is fixed in the PBCs utilized by the Army, the Contractor's performance will be evaluated by assessing the key milestones/deliverables described above according to two standards: quality and timeliness. For each of these performance standards, the COR will assign one of three ratings of the Contractor's performance: superior, acceptable, or unacceptable (as shown in Table 1). Note: These performance standards may be modified to meet the needs of a specific installation.

Table 1 Performance Standards (Established and Defined by the Contractor in Conjunction with the COR)

Performance	Superior	Acceptable	Unacceptable
Standard	Performance	Performance	Performance
Quality	Contractor exceeds the requirements in the PWS for the milestone/deliverable. Deliverables	Contractor meets the requirements in the PWS for the milestone/deliverable. Deliverables	Contractor does not meet the requirements in the PWS for the milestone/ deliverable. Deliverables/milestones

	/milestones are approved after one round of comments from Army and Regulators and no revisions are required.	/milestones are approved with two rounds of comments received from Army and Regulators and no further revisions are required.	require more than two rounds of Army and Regulators comments before being approved.
Timeliness	Contractor provides acceptable milestone/deliverable ahead of the schedule outlined in the PMP.	Contractor provides milestone/deliverable according to the schedule outlined in the PMP.	Contractor provides milestone/deliverable behind the schedule outlined in the PMP

If a milestone/deliverable is rated as being of unacceptable quality at the time that the PMP deadline for the milestone/deliverable expires, the milestone/deliverable will automatically receive an unacceptable rating for timeliness. At no point will a milestone/deliverable receive an acceptable or superior rating for timeliness if it is rated as being of unacceptable quality. Overall acceptable performance on a milestone/deliverable requires ratings of acceptable or superior for both the quality and timeliness standards.

5.0 Surveillance Methodology

The surveillance methods listed below will be used in the administration of this QASP.

100% Inspection

At the completion of all key milestones and deliverables, performance will be evaluated through 100% inspection (e.g., document review). The COR will document performance for each completed milestone/deliverable prior to payment, as described in Section 6.0.

Periodic Progress Inspection

At the COR's discretion, periodic inspections may be conducted to evaluate progress toward key milestones and deliverables. The COR may complete a periodic progress inspection if s/he believes that deficiencies exist that must be addressed prior to milestone/deliverable completion. While corrective action or re-performance will be required if necessary, the Contractor will not be financially penalized for unacceptable performance recorded in periodic progress reports, provided that final performance evaluation of the milestone/deliverable is deemed acceptable.

Customer Feedback

Additional feedback will be obtained through random customer complaints. To be considered valid, customer complaints must set forth clearly and in writing the detailed nature of the complaint, must be signed, and must be forwarded to the KO. The KO will maintain a summary log of all formally received customer complaints as well as a copy of each complaint in a documentation file.

6.0 Surveillance Documentation

The COR will use a performance evaluation form to record evaluation of the Contractor's performance for each milestone and deliverable in accordance with the methodology described in Sections 4.0 and 5.0. The COR must substantiate, through narratives in the form, all superior and unacceptable ratings. Performance at the acceptable level is expected from the Contractor. At a minimum, the evaluation form will indicate actual and scheduled delivery times and number of reviews required to achieve the final product.

The COR will forward copies of all completed performance evaluation forms to the KO and Contractor within one week of performing the inspection. When a milestone/deliverable receives an overall unacceptable rating, the Contractor will explain, within 15 days, in writing to COR why performance was unacceptable, how performance will be returned to acceptable levels, and how recurrence of the problem will be prevented in the future.

The KO will review each performance evaluation form prepared by the COR. When appropriate, the KO may investigate further to determine if all the facts and circumstances surrounding the event were considered in the COR opinions outlined on the form. The KO will immediately discuss any unacceptable rating with the Contractor to assure that corrective action is promptly initiated.

At the end of every year, the COR will prepare a written report for the KO summarizing the overall results of his/her surveillance of the Contractor's performance during the previous 12 months. This report will become part of the formal QA documentation.

The COR will maintain a complete QA file. This file will contain copies of all performance evaluation forms and any other related documentation. The COR will forward these records to the KO at termination or completion of the contract.

7.0 Payment and Corrective Action

Full payment for a milestone/deliverable will be provided upon verification of overall acceptable performance, as rated on quality and timeliness. This verification will be recorded in a performance evaluation form submitted to the KO specifying overall Contractor performance as either acceptable or superior for the milestone/deliverable.

If a milestone/deliverable receives an unacceptable rating for the quality performance standard, re-performance is required until the milestone/deliverable receives an acceptable rating. This reperformance is required regardless of cost or schedule constraints that may result from the unacceptable performance, unless the KO has opted to terminate the contract.

Table 2 summarizes the minimum key elements planned for the QASP. The final QASP will be developed with the COR and the contractor and will be based on the final PMP.

Additional Government surveillance activities may include, but are not limited to, the following [List is Installation/PWS specific]:

- 1) Work plan review and approval
- 2) Oversight of drilling, field sampling activities
- 3) Oversight of all waste management functions/responsibilities

[INSTALLATION]

- 4) Review of all waste management documentation
- 5) Separate/split laboratory QA samples
- 6) Review and approval of all access agreements associated with off-site areas
- 7) Review and approval of meeting minutes from RAB/BCT meetings
- 8) Review and approval of all deliverables to regulatory agencies
- 9) Review and approval of FS options to be considered
- 10) Review of quality control documentation
- 11) Review of project safety record
- 12) Adherence to the approved work plan

Table 2 Performance Objectives, Acceptance Criteria, and Monitoring Methods

Performance Objectives (from Table 1 in	Performance Standard (from	Acceptable	Monitoring Method
PWS)	Table 1 in PWS)	Quality Levels	
Approved Project Management Plan (PMP) and Quality Assurance Surveillance Plan (QASP): • Draft within 30 days of Task Order award • Final within 30 days of receipt of COR comments on the draft PMP	1. Army approval through the COR	Acceptable or superior performance, as defined in the QASP	100% inspection of milestones / deliverables associated with objective • Interim Payment schedule included in the PMP. • Resource loaded scheduled included in the PMP • Project Status reports provided as proposed



Attachment 4.1: Guaranteed Fixed Price Remediation Generic PBC Performance Work Statement USAEC Performance-Based Contracting Guidebook [INSTALLATION] QUALITY ASSURANCE MONITORING FORM

Date:/
Work Task (Milestone/Activity):
Survey Period:/ through/ Method of Surveillance: COR Review
Evaluation of Contractor's Performance:
Corrective Action Required: Yes No
Narrative Discussion of Contractor's Performance During Survey Period:
Discussion

CORRECTIVE ACTION FORM FOR QASP

1) Work Task (Milestone/Activity):
2) Survey Period:/ through/
3) Description of the Failure/Deficiency that Precipitated the Corrective Action:
4) Description of the Criterion that the Failure/Deficiency was Evaluated Against:
5) Personnel Involved in the Identification of the Failure/Deficiency, Determination of the Appropriate Corrective Action, Approval of the Corrective Action, and Implementation of the Corrective Action:
6) Description of the Corrective Action that was Required: Description
Description
7) Date/Time of Implementation of the Corrective Action:/
Description
8) Follow-Up Information to Prevent Recurrence of Failure/ Deficiency (i.e., Need For Revision of Procedures or Specifications):

9) Personnel Responsible for Follow-Up Work:
10) Planned Date for Follow-Up Surveillance:/
,
11) Other Notes:
'
Other

1.0 Introduction

The Contractor shall be responsible for fully executing the Firm Fixed Price Remediation (FFPR) approach under a Performance-Based Contract (PBC), by: conducting required environmental restoration services for which the United States Department of the Army (the "Army") is statutorily responsible; addressing any and all unforeseen environmental, scheduling, and regulatory issues; and, assuming contractual liability and responsibility for the achievement of the performance objectives for the cleanup sites at the [Installation] (the "Installation") identified in this Performance Work Statement (PWS), including any sites with off-installation contamination for which the Army is responsible. Contractors should note that "Unforeseen environmental issues" include unknown and/or varied concentrations of contaminants at cleanup sites (off-installation areas included) identified in this PWS, but not unknown sites (e.g., sites not identified in this PWS).

[The following list of required capabilities will be installation-specific and may require revision of the "following note" and Section 5.11.] The Contractor must have the capability and experience to perform, or provide, a wide range of investigative, remedial design, remedial construction, and remediation services required for hazardous substance and waste sites, munitions and explosives of concern (MEC), and chemical warfare materiel (CWM). [The following note will be installation-specific] Contractors should note that under this PWS the Contractor will not perform MEC/CWM work; however, the Contractor should be familiar with and be able to recognize MEC/CWM and then notify the Army of potential condition. Work will include, for example, site investigation, site characterization, evaluation of remedial alternatives, remedial design, remedial construction, remediation of contaminated sites, remedial action (operations), and long-term management.

It is the Contractor's responsibility to comply with all applicable federal, state and local laws and regulations and to fulfill the performance objectives of this PWS in a manner that is consistent with any applicable orders or permits, all existing and future cleanup agreements or guidance for the Installation, and relevant Department of Defense (DoD) and Army policy, for the duration of the contract. It is the Contractor's responsibility to comply with all necessary insurance requirements, specifically set forth in Section 5.6.

[The following paragraph will be installation-specific.] The Contractor must perform all the necessary environmental remediation work as required to meet the performance objectives of this PWS. Remediation is being conducted pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), and National Oil and Hazardous Substances Contingency Plan (NCP) requirements, with regulatory coordination, as appropriate, of the [State Agency] and the United States Environmental Protection Agency (USEPA) Region [Number]. Additionally work may be conducted pursuant to Resource Conservation Recovery Act (RCRA) or other applicable authorities.

[The following paragraph will be installation-specific.] The Installation was proposed for the National Priorities List (NPL) in [Date] due to [Reason]. The Installation was placed on the NPL in [Date]. [Regulatory Agencies] and the Army signed a Federal Facilities Agreement (FFA) on [Date].

The following paragraph will be included for installations with unregulated contaminants and CERCLA as the regulatory driver.] Certain pollutants or contaminants (P/C) may be an issue at sites covered by this PWS. Cleanup of P/C may be warranted if the P/C presents an imminent and substantial endangerment to the public health or welfare that results in an unacceptable risk. P/C, as defined in CERCLA, typically do not have a federally promulgated maximum contaminant limit (MCL). For any such P/C, or any other chemical, that does not have a federally promulgated MCL, but does have a finalized reference dose (RfD) or slope factor listed in USEPA's Integrated Risk Information System (IRIS) database, that RfD or slope factor should be incorporated in the NCP risk assessment process. However, funding will not be provided for responses that are not in full compliance with CERCLA, RCRA, the Defense Environmental Restoration Program (DERP), and DoD and Army policy. Additionally, state standards will only be analyzed through the CERCLA applicable or relevant and appropriate requirement (ARAR) process.

The following paragraph will be included for installations with unregulated contaminants and RCRA as the regulatory driver.] Certain pollutants or contaminants (P/C) may be an issue at sites covered by this PWS. Cleanup of P/C may be warranted if the P/C presents an imminent and substantial endangerment to the public health or welfare that results in an unacceptable risk. P/C typically do not have a federally promulgated maximum contaminant limit (MCL). For any such P/C, or any other chemical, that does not have a federally promulgated MCL, but does have a finalized reference dose (RfD) or slope factor listed in USEPA's Integrated Risk Information System (IRIS) database, that RfD or slope factor should be incorporated in the risk assessment process. However, funding will not be provided for responses that are not in full compliance with CERCLA, RCRA, the Defense Environmental Restoration Program (DERP), and DoD and Army policy. Additionally, state standards will only be analyzed through the appropriate statutory analysis for applicable standards and requirements.

2.0 Performance Objectives and Standards

The performance objectives and standards for this PWS are outlined in Table 1. Contractors should note that the current status of the remediation efforts for each site can be found in Section 6.0: Installation and Site Information. Additional documentation is provided with the Request for Proposal (RFP) package.

[Note: Table 1 may be specified by media type (e.g., Soil sites should be able to go to RC; Groundwater is more likely to be RIP]

Table 1: Performance Requirements Summary.

Performance Objective	Performance Standards
 Approved Project Management Plan (PMP) and Quality Assurance Surveillance Plan (QASP); Draft within 30 days of Task Order award Final within 30 days of receipt of COR comments on the draft PMP 	Army approval through the COR.

Attachment 4.2: Firm Fixed Price Remediation Generic PBC Performance Work Statement USAEC Performance-Based Contracting Guidebook

[INSTALLATION]

Performance Objective	Performance Standards
Achieve Remedy in Place (RIP) at the following sites by [Date]: [List of RIP Sites]	Compliance with the FFA and associated schedule [if applicable]
Upon achievement of RIP, perform Remedial Action (Operations) (RA(O)) at the above sites for the duration of the contract or until achievement of Response Complete (RC), whichever comes first. Upon achievement of RC, perform any necessary Long-Term Management (LTM) at the above sites for the duration of the contract.	Army approval through the Contracting Officer's Representative (COR) and Regulator approval or concurrence (e.g., receipt of documentation confirming RIP; approval of annual RA(O) reports; approval of RA(O) exit or ramp down strategy).
RA(O) includes development and implementation of an exit or ramp-down strategy for RA(O) activities at each site.	
Perform RA(O) at the following sites for the duration of the contract or until achievement of RC, whichever comes first: [List of RA(O) Sites] RA(O) includes development and implementation of an exit or ramp-down strategy for RA(O) activities at each site.	Army approval through the COR and Regulator approval or concurrence (e.g., approval of annual RA(O) reports; approval of RA(O) exit or ramp down strategy).
Achieve RC at the following sites by [Date]:	Compliance with FFA and associated schedule
[List of RC Sites]	[if applicable]
Upon achievement of RC, perform any necessary Long-Term Management (LTM) at the above sites for the duration of the contract.	Army approval through the COR and Regulator approval or concurrence (e.g., receipt of documentation confirming RC; approval of annual LTM reports; approval of
LTM includes development and implementation of an exit or ramp-down strategy for LTM activities at each site.	LTM exit or ramp down strategy).
Perform any necessary LTM at the following sites for the duration of the contract: [List of LTM Sites] LTM includes development and implementation of an exit or ramp-down strategy for LTM activities at each site.	Army approval through the COR and Regulator approval or concurrence (e.g., approval of annual LTM reports; approval of LTM exit or ramp down strategy).
For all remedies, optimize capital and long-term costs.	Acceptance by the COR that the Contractor has demonstrated that the proposed remedy represents the lowest 30-year present worth cost to the Army, and is acceptable to the regulators.
Complete all CERCLA 121(c) reviews required for the sites identified above, for the duration of the contract.	Army approval through the COR and Regulator approval or concurrence (e.g., formal documentation accepting the reviews
Correct any deficiencies noted in the CERCLA 121(c) reviews.	and any corrections).
Consolidate CERCLA 121(c) reviews into a single installation-wide review conducted at the conclusion of the contract.	
[Additional installation-specific performance objectives, such as "Achieve levels of <2ppb RDX at the identified point of compliance."]	Army approval through the COR and Regulator approval or concurrence (e.g., documentation acknowledging that objective was achieved in a manner acceptable to Army and Regulators).

Contractors should note that Remedy in Place, Remedial Action (Operations), Response Complete, and Long-Term Management are terms used for Defense Environmental Restoration Program. These terms are defined in Attachment C.

RIP or RC will be attained upon the finalization of appropriate written documentation certifying that site remediation has met identified response objectives and no further action is necessary, subject to any requirement for RA(O) and/or LTM. Contractors should note that when RA(O), LTM and/or a CERCLA 121(c) review is necessary as a result of the Contractor's remediation activities at a site, the Contractor shall be responsible for the following:

- Performing the required RA(O) and/or LTM at that site for the duration of the contract.
- Conducting any CERCLA 121(c) reviews required at that site for the duration of the contract.
- Gercla 121(c) reviews conducted during the duration of the contract constitute a Government Inspection of Services. The Contractor will correct any problems and/or deficiencies noted by during RA(O), LTM or within a CERCLA 121(c) review. If reperformance is required to correct the deficiencies noted during RA(O), LTM or within a CERCLA 121(c) review, the Contractor may be required to modify the existing remedy, implement a contingent remedy, modify the monitoring parameters and/or frequency, or take other activities deemed necessary to correct the deficiencies. Corrective action must be certified and approved consistent with Section C.6.1 of the basic contract. If the Contractor is conducting RA(O) or LTM, or completing a CERCLA 121(c) review, for a remedy that they did not implement or modify (i.e., an on-going pump and treat system inherited as part of the PBC scope), correction of substantive remedy deficiencies noted during RA(O), LTM or within a CERCLA 121(c) review which may require modification of that remedy are considered outside the scope of this contract effort.

There may be multiple milestones and/or deliverables for each performance objective (see Section 3.4 and Section 7.0). Partial payments will be based on successful completion of the milestones. Final decisions regarding the adequacy of milestone and deliverable completion resides with [Installation]'s COR (see Section 5.1), with appropriate acceptance and approval of necessary site remediation documentation by regulators, consistent with applicable regulatory drivers listed in Section 1.0 of this PWS. For the duration of the contract, the Contractor shall remain responsible for correction of remedy deficiencies noted during RA(O), LTM, and CERCLA 121(c) reviews.

3.0 Project Management

The PBC approach requires careful coordination of project activities to ensure that all stakeholders are kept informed of the project status, existing or potential problems, and any changes required to prudently manage the project and meet the needs of the Installation's project stakeholders and decision-makers. The Contractor shall be responsible for the following project management activities:

3.1 Project Management Plan

The Contractor shall develop and maintain a detailed Project Management Plan (PMP). The PMP, based on the schedule prepared as part of the Contractor proposal, shall specify the schedule, technical approach, and resources required for the planning, execution, and completion of the performance objectives. The first draft of the PMP shall be due within thirty (30) days of

contract award. Elements of this draft PMP shall be part of the offeror's proposal submittal. The draft PMP and subsequent revisions shall be subject to Army review and approval, through the COR. The final PMP shall be due within 30 days of receipt of COR comments on the draft PMP. A payment milestone will be established for Army approval of the final PMP through the COR.

As part of the PMP, the Contractor shall develop and maintain a Resource-Loaded Schedule that fully supports the technical approach and outlines the due dates and cost expenditure percentages for all milestones and payable deliverables. A payment plan shall be included with the schedule that may allow for partial payments to the Contractor based on successful completion of interim milestones proposed by the Contractor. It is the Army's intent to make all payments after verification of progress in accordance with this schedule. Unless otherwise noted in Table 1, all performance objectives must be completed within the allowable contract period of performance, provided all contract options have been exercised. The Contractor shall need to take into account the existing or future schedules developed under the applicable regulatory drivers listed in Section 1.0 of this PWS. The Contractor shall also need to coordinate activities with the COR to ensure that the proposed project schedule does not conflict with other contractor activities on site, or interrupt Installation mission activities.

As part of the PMP, the Contractor shall identify and implement a means for providing project status reports to the COR. The PMP shall address the frequency and content of status reports.

The Contractor shall update the PMP to reflect progress towards achievement of the performance objectives and delineate proposed actions to accomplish future project milestones.

3.2 Additional Site Plans

Prior to beginning any field work the Contractor shall prepare any additional plans or documents (e.g., sampling and analysis plans, quality assurance project plan, waste minimization plans, health and safety plans) consistent with the applicable regulatory drivers listed in Section 1.0 of this PWS, and any other agreements, orders, or regulations that apply to the Installation and sites. These plans and documents shall be subject to Army review and approval, through the COR.

3.3 Quality Management

The Contractor must ensure that the quality of all work performed or produced under this contract meets Army approval, through the COR. Quality control/assurance plans must be prepared and approved by the COR prior to performance of physical work.

Since the technical approach for this PBC shall be developed by the Contractor, the Contractor shall also develop a draft Quality Assurance Surveillance Plan (QASP). The draft QASP shall be submitted with the proposal using the QASP template provided in Attachment D. The final QASP shall be submitted with the PMP. The QASP should highlight key quality control activities or events that the COR will use to determine when Army (COR or Contracting Officer (KO)) inspections can be conducted to assess progress toward milestones. Activities identified in the QASP should be appropriately coded in the project schedule to allow for planning of QA inspections. The Final QASP will be approved by the COR and provided to the Contractor within thirty (30) days of receiving the final approved PMP.

3.4 Milestone Presentations

Milestone presentations shall be made to the COR at the completion of each milestone below to provide analysis and lessons learned, and to present approaches for completion of future milestones. At the COR's request, the Contractor may also make milestone presentations to the other project stakeholders, consistent with the applicable regulatory drivers listed in Section 1.0 of this PWS, to show achievement of the performance objectives. This includes participation in annual Installation Action Plan (IAP) meetings, if requested by the COR.

The Contractor may propose a revision of the milestones below to reflect their PMP and provide for interim milestones. Interim milestones will only be accepted if they represent significant progress toward milestone completion, and completion of these interim steps can be measured and demonstrated. As noted in Section 2.0, partial payments will be tied to the successful completion of the following milestones or an interim milestone plan approved by the Army, through the COR. To that end, all proposed interim milestones should be associated with easily demonstrated metrics tied to performance measurements (e.g., final acceptance of a report rather than submission of a draft). All milestones must have a defined means for demonstrating completion in order to facilitate certification and approval (see Section 5.1).

Major Milestones

- Approval of the Project Management Plan
- Achievement of (acceptance/approval of) RIP at [Site] by [Date]
- Approval of annual RA(O) reports
- Approval of an exit or ramp-down strategy for RA(O)
- Achievement of (acceptance/approval of) RC at [Site] by [Date]
- Approval of annual LTM reports
- Approval of an exit or ramp-down strategy for LTM
- Approval of the CERCLA 121(c) review(s)
- Successful correction of deficiencies noted in the CERCLA 121(c) review(s)

3.5 Environmental Requirements

The Contractor shall identify: applicable Federal, State and Local laws and regulations; applicable Installation-specific orders, agreements, or rules; and perform its work in accordance with said authorities. The Contractor shall ensure that all activities performed by its personnel, subcontractors and suppliers are executed in accordance with said authorities. Any incident of noncompliance noted by the Contractor shall immediately be brought to the attention of the COR and Installation [or "facility operator" if applicable] telephonically and then by written notice. Nothing in this contract shall relieve the Contractor of its responsibility to comply with applicable laws and regulations. The Contractor shall obtain all permits, licenses, approvals, and/or certificates required or necessary to accomplish the work. When the work to be performed requires facility clearances, such as digging or drilling permits, the Contractor shall obtain such clearances and/or permits, with the assistance of the installation point of contact, prior to any drilling or excavating operations. The Contractor shall coordinate all such work with Installation maintenance personnel prior to performing work. Contractors on environmental sites are required to perform their own utility checks based on Installation-supplied utility maps.

The Contractor shall comply with all Installation- or site-specific time and procedural requirements (federal, state, and local) described in the permits obtained. The Army technical experts will also independently review Contractor work to ensure compliance with all applicable requirements.

The following paragraph will be installation-specific.] The Army has/will establish/ed a Standard Operating Procedure and a Geographic Information System (GIS)-based tracking system to ensure the Land Use Controls (LUCs) are enforced. The LUCs will/have been incorporated into the post-wide Master Plan and compliance with LUCs will be reported in the Monitoring Reports for each site. The LUC policy applies to all units and activities, Military and Civilian Support Activities, tenant organizations and agencies and Government and Civilian Contractors. Compliance with the LUC policy is required in all RA(O), LTM and CERCLA 121(c) review activities.

3.5.1 Protection of Property

The Contractor shall be responsible for any damage caused to property of the United States (Federal property) by the activities of the Contractor under this contract and shall exercise due diligence in the protection of all property located on the premises against fire or damage from any and all other causes. Any property of the United States damaged or destroyed by the Contractor incident to the exercise of the privileges herein granted shall be promptly repaired or replaced by the Contractor to a condition satisfactory to the COR or reimbursement is made by the Contractor sufficient to restore or replace the property to a condition satisfactory to the COR in accordance with FAR Clause 52.245-2.

3.6 Health and Safety Requirements

The Contractor shall implement a written Safety and Health Program compliant with federal, state, and local laws and regulations and approved by the KO. The Contractor shall ensure that its subcontractors, suppliers and support personnel comply with the approved Site Safety and Health Plan (SSHP). The Army reserves the right to stop work under this contract for any violations of the SSHP at no additional cost to the Army. Once the Army verifies through the COR that the violation has been corrected, the Contractor shall be able to continue work. As a minimum, the SSHP shall contain the following elements: site description and contaminant characterization, safety and health hazard(s) assessment and risk analysis, safety and health staff organization and responsibilities, site specific training and medical surveillance parameters, personal protective equipment (PPE) and decontamination facilities and procedures to be used, monitoring and sampling required, safety and health work precautions and procedures, site control measures, on-site first aid and emergency equipment, emergency response plans and contingency procedures (on-site and off-site), logs, reports, and record keeping.

3.7 Quality Control Testing

Chemical Quality Control shall be provided whenever sampling or analysis for chemical constituents is required in order to achieve milestones. Quality control for traditional soils or geotechnical testing shall also be included. The laboratory(ies) to be used by the Contractor shall be National Environmental Laboratory Accreditation Program (NELAP) certified or equivalent. The Contractor may establish an on-site testing laboratory at the project site if determined

necessary by the Contractor. However, on-site testing shall meet the requirements of USEPA, specific state regulator requirements, and all requirements of the DoD Quality Systems Manual, Version 2.

3.8 Project Repository and Administrative Record

The Contractor shall update at least monthly a multimedia (i.e., both paper and electronic format) project repository of all project-related information to ensure that pertinent documentation and data are available for project reviews, and to provide a clear record of the PBC approach to support final decisions and remediation completion. This repository is the property of the Army and available to the Army upon request by the COR or KO. A project repository is currently maintained at [Location].

"Project-related information" includes all previous environmental restoration documentation of a technical nature developed by the Army and previous Army contractors for the sites specified in this PWS, and all the documentation developed by the Contractor in order to achieve the performance objectives specified in this PWS. Documents generated prior to the PBC are not expected to be stored in electronic format; however, all documents generated by the Contractor shall be maintained in multi-media form.

The Contractor shall also update the repositories for the Administrative Record for CERCLA activities established at [Location], as needed. The project repository and Administrative Record shall be updated by the Contractor, and made available to the public, for the duration of the contract.

3.9 Army Environmental Database and Environmental Restoration Information System

Once a site identified in this PWS has achieved Response Complete (i.e., appropriate documentation is finalized), the Contractor shall be responsible for providing the COR with the data and documentation necessary for the closeout of each site from the Army Environmental Database - Restoration Module (AEDB-R). In addition, the Contractor shall electronically submit all generated analytical data into the Environmental Restoration Information System (ERIS). Information regarding ERIS is available online at http://aec.army.mil/usaec/reporting/eris00.html. The Army, through the COR, will provide data specifications for AEDB-R and ERIS to the Contractor. The Contractor shall comply with all applicable requirements for data validation and submission.

3.10 Regulatory Involvement

All regulatory coordination shall be approved by the Army through the COR. The Contractor shall provide the necessary support to initiate, schedule, and address all regulatory aspects of the project (e.g., organizing discussions with regulators concerning site response objectives and completion requirements, obtaining regulator comments on site documents and appropriately addressing them, and obtaining written documentation of remediation completion from the regulators for all of the sites identified in this PWS). The COR, or designee, will attend and represent the Army at all meetings with the regulators. With approval of the COR, the contractor may also informally discuss remediation issues with regulators and provide an after-action report

back to the COR. The Army will be the signature authority for all regulatory agreements and remediation documentation.

3.11 Public Involvement

All public participation coordination shall be approved by the Army through the COR. The Contractor shall provide the necessary support to initiate, schedule, and address all public participation aspects of the project (e.g., preparation of briefings, presentations, fact sheets, newsletters, articles/public notices to news media, and notifications to Restoration Advisory Board (RAB) members). The Contractor shall be responsible for requesting and addressing all public comments consistent with the applicable regulatory drivers listed in Section 1.0 of this PWS. The COR, or designee, will attend and represent the Army at all meetings with the public.

[The following paragraph will be installation-specific.] Contractors should note that the Installation has an active RAB and detailed information concerning the RAB's organization and activities will be provided to the Contractor. Activities required to support the RAB meetings are included in this effort. The Contractor shall be responsible for the minutes of all RAB meetings and shall submit these minutes to the COR for approval. The Contractor shall also secure a location for each scheduled meeting and shall provide all equipment to support these meetings.

3.12 Project Stakeholders

For the purposes of this PWS, project stakeholders include the Army, [Regulatory Agencies], and the RAB[If applicable]. Required level of involvement may differ from site to site and the Contractor shall be responsible for obtaining comments with appropriate approval or concurrence on project deliverables consistent with applicable regulatory drivers and agreements for each site.

3.13 Deliverable Requirements

All documents must be produced with at least draft, draft-final, and final versions. With Army concurrence, the Contractor may coordinate with appropriate regulatory agencies to determine if fewer versions of each deliverable are sufficient for review. The Army, through the COR, will receive initial draft documents and will provide comments to the Contractor within five (5) [confirm duration with installation] business days. Once initial comments are addressed, the Army will review draft documents before submission to appropriate regulatory agencies. The Contractor shall ensure that review periods are consistent with the applicable regulatory drivers noted in Section 1.0 of this PWS. All documents shall be identified as draft until completion of stakeholder coordination, when they will be signed and finalized. One copy of the final document shall be placed in both the project repository and Administrative Record (for CERCLA documents).

4.0 Expertise and Necessary Personnel

The Contractor shall provide the necessary personnel and equipment to successfully execute this PWS. The Contractor is responsible for determining the requirements for licensed professionals and certifications.

The Contractor shall furnish all plant, labor, materials and equipment necessary to meet the performance objectives. The Contractor shall provide personnel trained as required by the Occupational Safety and Health Administration (OSHA) and all other applicable federal and state regulations. The Contractor shall provide all support activities necessary to ensure the safe and effective accomplishment of all work. For all work performed under this contract, the Contractor shall also develop and implement quality control measures consistent with all applicable federal and state regulatory requirements and standards.

5.0 Additional Requirements

5.1 Certification and Approval of Project Milestones and Deliverables

The COR will be responsible for contract management, inspection, oversight, review, and approval activities. Certification and approval of project milestones by the COR is necessary before distribution of partial payments. Final acceptance of milestone completion shall include appropriate acceptance of site remediation documentation by regulators. For the duration of the contract, the Contractor shall remain responsible for correction of remedy deficiencies noted during RA(O), LTM, and CERCLA 121(c) reviews.

Certification by the Army is contingent upon the Contractor performing in accordance with the terms and conditions of the contract, this PWS, and all amendments/options.

Representatives of the U.S. Army Environmental Center (USAEC) and the Contractor shall meet with the COR at a site and time designated by the COR after receipt of each status report to:

- Formally review the quantity and quality of services;
- Inspect work for compliance with this PWS, the associated Contractor's final proposal, and project documentation;
- Accept or reject milestones and deliverables completed since the previous review; and
- Prepare, approve and submit DD Form 250 "Material Inspection and Receiving Report" for partial payments in accordance with milestone completions and approvals at the USAEC level.

5.2 Army Furnished Resources

The Army, through the COR, shall make available the following resources to the Contractor:

- Records, reports, data, analyses, and information, in their current format (e.g., paper copy, electronic, tape, disks, CDs), to facilitate development of an accurate assessment of current, former, and historical site activities and operations; waste generation and contaminant characteristics; parameters of interest; and site environmental conditions.
- Access to personnel to conduct interviews on Installation operations and activities.
- Access to DoD and Army policy and guidance documents.
- All Army owned property used for remediation purposes must be maintained by the Contractor in accordance with applicable maintenance requirements, and may not be replaced by the Army should new equipment be required.
- [Others to be determined, depending on the nature of the contract mechanism used.]

5.3 Contractor Furnished Resources

The Contractor shall be responsible for the following:

- Coordination with the Army/COR and the Installation for access to the Installation, to execute this PWS and comply with the procedures described during the Contractors' meeting at the Installation.
- Coordination with the Army/COR and the Installation in order to gain access to available infrastructure (e.g., buildings, roadways, waste management units, other Installation facilities) and utilities (e.g., electric power and telephone lines, natural gas and water supply distribution pipelines, and wastewater discharge conveyances), to execute this PWS.
- [The following bullet will be installation-specific.] The provision and cost of the utilities associated with implementation of remedies, including installation of individual meters for necessary utilities.
- All waste generated under this contract shall be the responsibility of the Contractor.
- Any other necessary resources needed to achieve the performance objectives.

5.4 Government Rights

The Army has unlimited rights to all documents/material produced under this contract. All documents and materials, to include the source codes of any software, produced under this contract shall be Army owned and are the property of the Army with all rights and privileges of ownership/copyright belonging exclusively to the Army. These documents and materials cannot be used or sold by the Contractor without written permission from the KO. All materials supplied to the Army shall be the sole property of the Army and cannot be used for any other purpose. This right does not abrogate any other Army rights under the applicable Data Rights clause(s).

5.5 Place of Performance

Work will be performed at the Installation and off-site Contractor offices as agreed to by both parties for proper performance of this task.

5.6 Privacy and Security

In order to ensure the security and orderly running of the Installation, any contractor personnel who wish to gain access to the Installation shall follow procedures established by the Installation. Due to security restrictions, details of these and other security procedures will be provided at a later date to the Contractor. However, the Contractor should account for potential delays due to DoD security requirements in its pricing.

[include narrative explanation of installation access/security requirements or provide policy/procedure references and post documents on the webpage]

5.7 Staffing

The Contractor shall notify the COR of any changes in key personnel. The change of key personnel is subject to approval by the KO, although such approval will not be unreasonably withheld provided replacement personnel are of the same quality as originally proposed.

5.8 Stop Work

The Contractor, authorized Installation personnel, and the COR have the responsibility to stop work immediately if the work is considered to be a serious threat to the safety or health of workers, other personnel, or to the environment. Authorized Installation personnel include Installation safety officers, Environmental Division personnel, and command personnel with responsibility for overall Installation operations. When work is stopped due to a hazard/threat to worker safety, health, or the environment, the situation and resolution must be documented and submitted to the KO. Work must be stopped whenever chemical and biological warfare agents or radiological materials are encountered

5.9 Environmental Responsibility Considerations

- The Army will retain responsibility for any assessed natural resource damages that are attributed to historic releases of hazardous substances (prior to contract with contractor) and any injuries that are necessary and incidental to the reasonable implementation of a selected response or remedial action. The Contractor shall be responsible for any/all additional natural resource injuries and associated Natural Resource Damages claims brought as a result of its actions (e.g. release of hazardous substance or unreasonable disturbance of natural resources as a result of construction activities).
- [The following bullet will be installation-specific.] The Army will retain all responsibility for third party liability for CWM, MEC, or radiological material that are either targeted for or may be discovered during the course of remediation.
- Response cost claims, property damage and personal injury claims brought due to
 contamination and hazardous substance releases that have occurred historically (prior to
 contract with Contractor) and are not due to Contractor remediation activities are excluded
 from Contractor responsibility. The Contractor shall be responsible for and indemnify the
 Army for:
 - Any response cost claims for any environmental remediation services which the Contractor has assumed responsibility for under this PWS;
 - All costs associated with correction of a failure of any remedy implemented or
 operated and maintained by the Contractor to the extent such failure was caused by
 the willful or negligent acts or omissions of the Contractor in the course of
 performing the environmental services;
 - All personal injury or property damage claims to the extent caused by the acts or omissions of the Contractor in the course of performing the environmental services;
 - All natural resource damages pursuant to 42 U.S.C. Section 9607(a)(4)(C), to the extent that such damages were caused or contributed to by the actions of the Contractor or its successors in interest; and
 - All costs associated with or arising from any negligent acts or omissions or willful
 misconduct of the Contractor in the course of performing the environmental services
 or implementing remedial actions.

5.10 Organizational Conflicts of Interest

5.10.1 Disclosure. The Contractor shall provide a disclosure statement with its task order proposal, which concisely describes all relevant facts concerning any past or

present organizational conflicts of interest relating to the work in each task order. In the same statement, the Contractor shall provide the information required in the following paragraph to assure the Government that the conflicts of interest have been mitigated and/or neutralized to the maximum extent possible. If a conflict of interest is discovered after task order award, the Contracting Officer will make a decision whether to terminate or rescind the task order and/or contract at that time.

5.10.2 Potential Conflicts of Interest. This request for proposals is open to any offeror to compete as a prime contractor, subcontractor or in any teaming arrangement. In order to avoid any organizational conflicts of interest, or even the appearance of any organizational conflicts of interest, any contractor performing environmental services work at the follow-on installation(s) under each task order will need to avoid, neutralize and/or mitigate -- prior to task order award - significant potential conflicts of interest that may prejudice effective competition. The Contracting Officer has determined that at a minimum contractors currently performing work on the identified installation(s) under each task order must ensure that all data pertaining to contamination at the sites compiled by or in the possession of such contractors shall be made available to all potential contractors in a timely fashion to the maximum extent possible by providing such data in to a data depository.

6.0 Installation and Site Information

This section is intended to provide the Contractor with general site background information to assist in the Contractor's identification of the specific sites and corresponding documentation/existing reports. The Army believes the information presented below is accurate. However, if there is a conflict between this information and other site documentation (the existing reports), the Contractor is solely responsible for reviewing all available information and forming their independent, professional conclusions/interpretation of site conditions and requirements to meet the objectives of this PWS. The following information is not intended as a substitute for complete analysis of technical data available. Nor is it intended to be a guide on how the Contractor should address achievement of the performance objectives/standards.

6.1 Installation Setting and Status

[Installation-specific background information inserted here.]

The following provides a description of the current site status for each of the sites identified in this PWS. These descriptions are based on the best information at the disposal of the Army, site conditions may have changed, and it is the responsibility of potential Contractors to attend the site visit, research, investigate, and reach their own conclusions regarding site conditions.

6.2 [Site Name]

Site Information

[Site-specific information inserted here.]

Most Recent Documentation

• [List of most recent documentation for site inserted here.]

7.0 Project Deliverables

Contractors should note:

- This project deliverables list is subject to change based on an alternative deliverables list proposed by the Contractor and approved by the Army through the COR.
- As noted in Section 3.13, all documents must be produced with at least draft, draft-final, and final versions. This requirement is subject to change based on Contractor negotiations with the Army and regulators and approved by the COR/KO.

Table 2: Proposed Project Deliverables.

Deliverable Number	Deliverable Name
1	Final Project Management Plan
2	Additional Site Plans
3	Status Reports
4	Milestone Presentations
5	[Site] Documents (CERCLA)
6	[Site] Documents (Non-CERCLA)
7	Annual RA(O) Report(s)
8	RA(O) Exit/Ramp-Down Strategy Document(s)
9	Annual LTM Report(s)
10	LTM Exit/Ramp-Down Strategy Document(s)
11	CERCLA 121(c) Review Documents
12	CERCLA 121(c) Review Correction Documents

Attachment A: Reference Documents

Contractors should note:

- These documents are available on [reference CD or website].
- The Army believes this documentation represents the most recent and appropriate documentation available for the Installation and sites identified in this PWS.
- Additional documentation is available through [other sources]. Specific documents may be made available following a request, if the documentation can be distributed in a timely manner. Electronic format is not guaranteed.

Table 4: Available Reference Documents.

Title	Author	Date
[Insert list of all available documents]		

[INSTALLATION]

Attachment B: List of Acronyms

AEDB-R Army Environmental Database - Restoration Module ARAR Applicable or Relevant and Appropriate Requirement

CAIS Chemical Agent Identification Sets

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

COR Contracting Officer's Representative

CWM Chemical Warfare Materiel

DERP Defense Environmental Restoration Program

DMM Discarded Military Munitions DoD Department of Defense

ERIS Environmental Restoration Information System

FAR Federal Acquisition Regulation
FFA Federal Facility Agreement
FFPR Firm Fixed Price Remediation
GIS Geographic Information System

IAP Installation Action Plan IC Institutional Control

IRIS Integrated Risk Information System

KO Contracting Officer
LTM Long-Term Management
MCL Maximum Contaminant Level
MEC Munitions and Explosives of Concern

NCP National Oil and Hazardous Substances Contingency Plan NELAP National Environmental Laboratory Accreditation Program

NPL National Priorities List

OSHA Occupational Safety and Health Administration PBC Performance-Based Contract/Contracting

PMP Project Management Plan
PPE Personal Protective Equipment
PWS Performance Work Statement

QA Quality Assurance

QASP Quality Assurance Surveillance Plan

RAB Restoration Advisory Board RA(O) Remedial Action (Operations)

RC Response Complete

RCRA Resource Conservation and Recovery Act

RDX Royal Demolition eXplosive

RfD Reference Dose
RFQ Request for Quotation
RIP Remedy In Place
ROD Record of Decision

SARA Superfund Amendments and Reauthorization Act

SSHP Site Safety and Health Plan

TNT Trinitrotoluene

USAEC United States Army Environmental Center USEPA United States Environmental Protection Agency

UST Underground Storage Tank UXO Unexploded Ordnance

Attachment C: Definitions

Chemical Warfare Materiel (CWM): An item configured as a munitions containing a chemical substance that is intended to kill, seriously injure, or incapacitate a person through its physiological effects. CWM also includes V- and G- services nerve agent, H-series blister agent, and lewisite in other than munitions configurations. Due to their hazards, prevalence, and military-unique application, Chemical Agent Identification Sets (CAIS) are also considered CWM. CWM does not include: riot control agency, chemical herbicides, smoke and flame producing items, or soil, water, debris, or other media contaminated with chemical agent.

Deliverables: Documentation or data that support the completion of milestones or achievement of the performance objectives identified in this PWS.

Duration of the contract: The total period of performance to include option periods, if exercised.

Long-Term Management (LTM): The remedial phase including maintenance, monitoring, record keeping, remedy reviews, etc. initiated after response (removal or remedial) objectives have been met (i.e., after Response Complete).

Milestones: Significant events or activities that occur in the course of the Contractor achieving the performance objectives identified in this PWS.

Munitions and Explosives of Concern (MEC): This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks, means Unexploded Ordnance (UXO), as defined in 10 U.S.C. 2710 (e) (9); Discarded Military Munitions (DMM), as defined in 10 U.S.C. 2710 (e) (2); or Explosive munitions constituents (e.g., Trinitrotoluene (TNT), Royal Demolition eXplosive (RDX)) present in high enough concentrations to pose an explosive hazard.

PMP Documents: The original PMP (including project schedule), revisions, and status reports.

Project Documents (CERCLA): Documentation and data required by CERCLA remediation and RA(O) and/or LTM activities. These documents include the additional site plans referenced in Section 3.2.

[If applicable] Project Documents (UST, RCRA): Documentation and data required by underground storage tank (UST) or RCRA remediation and RA(O) and/or LTM activities.

Project-related information: All previous environmental restoration documentation of a technical nature developed by the Army and previous Army contractors and subcontractors during their work at the sites specified in this PWS, and all the documentation developed by the Contractor in order to achieve the performance objectives specified in this PWS.

Remedial Action (Operations) (RA(O)): The remedial phase during which the remedy is in place and operating to achieve the cleanup objective identified in the Record of Decision (ROD) or other formal decision document. Any system operation (long-term operations) or monitoring (long-term monitoring) requirements during this time are considered RA(O).

Remedy In Place (RIP): A final remedial action has been constructed and implemented and is operating as planned in the remedial design. An example of a remedy in place is a pump-and-treat system that is installed, is operating as designed, and will continue to operate until cleanup levels have been attained. Because operation of the remedy is ongoing, the site cannot be considered Response Complete.

Resource-loaded Schedule: A schedule of due dates and cost expenditure percentages for all milestones and payable deliverables.

Response Complete (RC): The remedy is in place and required RA(O) have been completed. If there is no RA(O) phase, then the remedial action—construction end date will also be the RC date. If no remedial action is required at a site (based on agreement with the Army and appropriate regulators), documentation of "No Further Action" will constitute Response Complete. Consistent with CERCLA, the Defense Environmental Restoration Program, and applicable Executive Orders and regulations, environmental response activities under the Installation Restoration program categories shall be considered "response complete" when all the response objectives identified in an appropriately signed ROD or other formal decision document have been achieved and documented.

- If environmental restoration activities allow for unrestricted use of the property, response complete is when there is verification of the achievement of the response objectives detailed in the ROD or other formal decision document.
- If environmental restoration activities do not allow for unrestricted use of the property, response complete occurs when: 1) There is verification of the achievement of the response objectives detailed in the ROD or other formal decision document; and 2) At least one subsequent review to ensure that the response action has remained effective and continues to be protective of human health and the environment as defined by the response objectives detailed in the ROD or other formal decision document has occurred; and 3) At least five years have elapsed.

Attachment D: Quality Assurance and Surveillance Plan (QASP) Template

1.0 Overview

This performance-based Quality Assurance Surveillance Plan (QASP) sets forth the procedures and guidance that the Contract Officer Representative (COR) will use in evaluating the technical performance of the Contractor in accordance with the terms and conditions of the performance work statement (PWS). The QASP objective is to define Government procedures to be used to verify that appropriate performance and quality assurance methods are used in the management of this performance-based contract. The purpose of the QASP is to assure that performance of specific activities and completion of milestones are accomplished in accordance with all requirements set forth in the PWS.

This QASP describes the mechanism for documenting noteworthy accomplishments or discrepancies for work performed by the Contractor. Information generated from COR's surveillance activities will directly feed into performance discussions with the Contractor. The intent is to ensure that the Contractor performs in accordance with performance metrics set forth in the contract documents, the Army receives the quality of services called for in the contract, the Army only pays for the acceptable level of services received.

The QASP details how and when the COR will monitor, evaluate, and document Contractor performance on the PWS. The QASP is intended to accomplish the following:

- 1. Define the role and responsibilities of participating Army officials.
- 2. Define the key milestones/deliverables that will be assessed.
- 3. Define acceptable, superior, and unacceptable performance standards for key milestones/deliverables.
- 4. Describe the surveillance methodology that will be employed by the Army in assessing the Contractor's performance.
- 5. Describe the surveillance documentation process and provide copies of the form that the Army will use in evaluating the Contractor's performance.
- 6. Outline payment and corrective action procedures.

This QASP will be revised and finalized by the COR and Contractor upon completion of the Project Management Plan (PMP).

2.0 Roles and Responsibilities of Army Officials

The Contracting Officer's Representative (COR) is responsible for technical administration of the project and assures proper Army surveillance of the Contractor's performance. The COR is responsible for monitoring, assessing, recording, and reporting on the technical performance of the Contractor on a day-to-day basis.

The Contracting Officer (KO) has overall responsibility for overseeing the Contractor's performance. The KO is responsible for the day-to-day monitoring of the Contractor's performance in the areas of contract compliance, and contract administration; reviewing the COR's assessment of the Contractor's performance; and resolving all differences between the COR's assessment and the Contractor's assessment of performance. It is the KO that assures

the Contractor receives impartial, fair, and equitable treatment under the contract. The KO is ultimately responsible for the final determination of the adequacy of the Contractor's performance.

The COR and KO may call upon the technical expertise of other Army officials and subject matter experts (SME) as required. These Army officials/SMEs may be called upon to review technical documents and products generated by the Contractor. Contracting Agency representatives will also conduct review of contract documentation such as invoices, monthly status reports, and work plans.

3.0 Key Milestones/Deliverables to be Assessed

At a minimum, the following milestones and associated deliverables will be evaluated in accordance with this QASP (Based on milestones/deliverables in the PWS):

- Completion of the final Project Management Plan (PMP)
- Achievement of performance objective at each site specified in the PWS
- Completion of annual monitoring report(s)
- Completion of the final exit or ramp-down strategy for LTM/LTO
- Completion of final remedy review(s)
- Correction of deficiencies noted in the remedy review(s)
- Approved interim milestones identified in the final PMP

Additionally, the Army will evaluate performance on the key quality control activities and events specified by the Contractor through their Quality Assurance (QA) strategy (see PWS Section 3.3: Quality Management).

4.0 Performance Standards for Key Milestones/Deliverables

Since cost is fixed in the PBCs utilized by the Army, the Contractor's performance will be evaluated by assessing the key milestones/deliverables described above according to two standards: quality and timeliness. For each of these performance standards, the COR will assign one of three ratings of the Contractor's performance: superior, acceptable, or unacceptable (as shown in Table 1). Note: These performance standards may be modified to meet the needs of a specific installation.

Table 1 Performance Standards (Established and Defined by the Contractor in Conjunction with the COR)

Performance	Superior	Acceptable	Unacceptable
Standard	Performance	Performance	Performance
Quality	Contractor exceeds the requirements in the PWS for the milestone/ deliverable. Deliverables /milestones are	Contractor meets the requirements in the PWS for the milestone/ deliverable. Deliverables /milestones are	Contractor does not meet the requirements in the PWS for the milestone/ deliverable. Deliverables/milestones require more than two

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	approved after one round of comments from Army and Regulators and no revisions are required.	approved with two rounds of comments received from Army and Regulators and no further revisions are required.	rounds of Army and Regulators comments before being approved.
Timeliness	Contractor provides acceptable milestone/deliverable ahead of the schedule outlined in the PMP.	Contractor provides milestone/deliverable according to the schedule outlined in the PMP.	Contractor provides milestone/deliverable behind the schedule outlined in the PMP

If a milestone/deliverable is rated as being of unacceptable quality at the time that the PMP deadline for the milestone/deliverable expires, the milestone/deliverable will automatically receive an unacceptable rating for timeliness. At no point will a milestone/deliverable receive an acceptable or superior rating for timeliness if it is rated as being of unacceptable quality. Overall acceptable performance on a milestone/deliverable requires ratings of acceptable or superior for both the quality and timeliness standards.

5.0 Surveillance Methodology

The surveillance methods listed below will be used in the administration of this QASP.

100% Inspection

At the completion of all key milestones and deliverables, performance will be evaluated through 100% inspection (e.g., document review). The COR will document performance for each completed milestone/deliverable prior to payment, as described in Section 6.0.

Periodic Progress Inspection

At the COR's discretion, periodic inspections may be conducted to evaluate progress toward key milestones and deliverables. The COR may complete a periodic progress inspection if s/he believes that deficiencies exist that must be addressed prior to milestone/deliverable completion. While corrective action or re-performance will be required if necessary, the Contractor will not be financially penalized for unacceptable performance recorded in periodic progress reports, provided that final performance evaluation of the milestone/deliverable is deemed acceptable.

Customer Feedback

Additional feedback will be obtained through random customer complaints. To be considered valid, customer complaints must set forth clearly and in writing the detailed nature of the complaint, must be signed, and must be forwarded to the KO. The KO will maintain a summary log of all formally received customer complaints as well as a copy of each complaint in a documentation file.

6.0 Surveillance Documentation

The COR will use a performance evaluation form to record evaluation of the Contractor's performance for each milestone and deliverable in accordance with the methodology described in

Sections 4.0 and 5.0. The COR must substantiate, through narratives in the form, all superior and unacceptable ratings. Performance at the acceptable level is expected from the Contractor. At a minimum, the evaluation form will indicate actual and scheduled delivery times and number of reviews required to achieve the final product.

The COR will forward copies of all completed performance evaluation forms to the KO and Contractor within one week of performing the inspection. When a milestone/deliverable receives an overall unacceptable rating, the Contractor will explain, within 15 days, in writing to COR why performance was unacceptable, how performance will be returned to acceptable levels, and how recurrence of the problem will be prevented in the future.

The KO will review each performance evaluation form prepared by the COR. When appropriate, the KO may investigate further to determine if all the facts and circumstances surrounding the event were considered in the COR opinions outlined on the form. The KO will immediately discuss any unacceptable rating with the Contractor to assure that corrective action is promptly initiated.

At the end of every year, the COR will prepare a written report for the KO summarizing the overall results of his/her surveillance of the Contractor's performance during the previous 12 months. This report will become part of the formal QA documentation.

The COR will maintain a complete QA file. This file will contain copies of all performance evaluation forms and any other related documentation. The COR will forward these records to the KO at termination or completion of the contract.

7.0 Payment and Corrective Action

Full payment for a milestone/deliverable will be provided upon verification of overall acceptable performance, as rated on quality and timeliness. This verification will be recorded in a performance evaluation form submitted to the KO specifying overall Contractor performance as either acceptable or superior for the milestone/deliverable.

If a milestone/deliverable receives an unacceptable rating for the quality performance standard, re-performance is required until the milestone/deliverable receives an acceptable rating. This reperformance is required regardless of cost or schedule constraints that may result from the unacceptable performance, unless the KO has opted to terminate the contract.

Table 2 summarizes the minimum key elements planned for the QASP. The final QASP will be developed with the COR and the contractor and will be based on the final PMP.

Additional Government surveillance activities may include, but are not limited to, the following:

- 1) Work plan review and approval
- 2) Oversight of drilling, field sampling activities
- 3) Oversight of all waste management functions/responsibilities
- 4) Review of all waste management documentation
- 5) Separate/split laboratory QA samples
- 6) Review and approval of all access agreements associated with off-site areas

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- 7) Review and approval of meeting minutes from RAB/BCT meetings
- 8) Review and approval of all deliverables to regulatory agencies
- 9) Review and approval of FS options to be considered
- 10) Review of quality control documentation
- 11) Review of project safety record
- 12) Adherence to the approved work plan

Table 2 Performance Objectives, Acceptance Criteria, and Monitoring Methods

Performance Objectives (from Table 1 in	Performance Standard (from	Acceptable	Monitoring Method
PWS)	Table 1 in PWS)	Quality Levels	
Approved Project Management Plan (PMP) and Quality Assurance Surveillance Plan (QASP): • Draft within 30 days of Task Order award • Final within 30 days of receipt of COR comments on the draft PMP	1. Army approval through the COR	Acceptable or superior performance, as defined in the QASP	100% inspection of milestones / deliverables associated with objective • Interim Payment schedule included in the PMP. • Resource loaded scheduled included in the PMP • Project Status reports provided as proposed



[INSTALLATION] QUALITY ASSURANCE MONITORING FORM

Date:/				
Work Task (Milestone/Activity):				
Survey Period:/ through/ Method of Surveillance: COR Review				
Evaluation of Contractor's Performance:				
Evaluation				
Corrective Action Required:				
Narrative Discussion of Contractor's Performance During Survey Period:				
Discussion				

[INSTALLATION]

CORRECTIVE ACTION FORM FOR QASP

1) Work Task (Milestone/Activity):
2) Survey Period:/ through/
3) Description of the Failure/Deficiency that Precipitated the Corrective Action: Description
Description
4) Description of the Criterion that the Failure/Deficiency was Evaluated Against: Description
Description
5) Personnel Involved in the Identification of the Failure/Deficiency, Determination of the Appropriate Corrective Action, Approval of the Corrective Action, and Implementation of the Corrective Action:
6) Description of the Corrective Action that was Required: Description
Description
7) Date/Time of Implementation of the Corrective Action:/
Description
8) Follow-Up Information to Prevent Recurrence of Failure/ Deficiency (i.e., Need For Revision of Procedures or Specifications):

9) Personnel Responsible for Follow-Up Work:		
10) Planned Date for Follow-Up Surveillance:/		
<u> </u>		
11) Other Notes:		
Other		
Guidi Cuidi		

1.0 Background and Introduction

This requirement is for environmental remediation services for [##] sites at the following installation: [installation name], located at [city, state].

[briefly describe the installation and remediation requirement in one or more paragraphs here]

[installation-specific/insert as applicable.] Remediation is being conducted pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), and National Oil and Hazardous Substances Contingency Plan (NCP) requirements, with regulatory coordination, as appropriate, of the [State Agency] and the United States Environmental Protection Agency (USEPA) Region [Number]. Additionally work may be conducted pursuant to Resource Conservation Recovery Act (RCRA) or other applicable authorities.

[installation-specific/insert as applicable.] The Installation was proposed for the National Priorities List (NPL) in [Date] due to [Reason]. The Installation was placed on the NPL in [Date]. [Regulatory Agencies] and the Army signed a Federal Facilities Agreement (FFA) on [Date].

[installation-specific/insert as applicable] Under this Task Order the Contractor will not perform munitions and explosives of concern (MEC) and/or chemical warfare materiel (CWM) work; however, the Contractor should be familiar with and be able to recognize MEC/CWM and then notify the Army of potential condition.

[installation-specific/include for installations with unregulated contaminants and CERCLA as the regulatory driver.] Certain pollutants or contaminants (P/C) may be an issue at sites covered by this Task Order. Cleanup of P/C may be warranted if the P/C presents an imminent and substantial endangerment to the public health or welfare that results in an unacceptable risk. P/C, as defined in CERCLA, typically do not have a federally promulgated maximum contaminant limit (MCL). For any such P/C, or any other chemical, that does not have a federally promulgated MCL, but does have a finalized reference dose (RfD) or slope factor listed in USEPA's Integrated Risk Information System (IRIS) database, that RfD or slope factor should be incorporated in the NCP risk assessment process. However, funding will not be provided for responses that are not in full compliance with CERCLA, RCRA, the Defense Environmental Restoration Program (DERP), and DoD and Army policy. Additionally, state standards will only be analyzed through the CERCLA applicable or relevant and appropriate requirement (ARAR) process.

[installation-specific/include for installations with unregulated contaminants and RCRA as the regulatory driver.] Certain pollutants or contaminants (P/C) may be an issue at sites covered by this Task Order. Cleanup of P/C may be warranted if the P/C presents an imminent and substantial endangerment to the public health or welfare that results in an unacceptable risk. P/C typically do not have a federally promulgated maximum contaminant limit (MCL). For any such P/C, or any other chemical, that does not have a federally promulgated MCL, but does have a finalized reference dose (RfD) or slope factor listed in USEPA's Integrated Risk Information System (IRIS) database, that RfD or slope factor should be incorporated in the risk assessment process. However, funding will not be provided for responses that are not in full compliance

with CERCLA, RCRA, the Defense Environmental Restoration Program (DERP), and DoD and Army policy. Additionally, state standards will only be analyzed through the appropriate statutory analysis for applicable standards and requirements.

2.0 Types of Services Required

This ta contra		er includes the following types of services as authorized in Section C.3 of the basic
		Site Characterization/Investigation
		Studies and Reports
		Support of Remedial Actions
		Remediation
		Monitoring
		MEC Support
3.0	Task Order Type [select only one]	
		Firm- Fixed Price (w/ insurance)
		Firm-Fixed Price (w/o insurance)
		Fixed Price with Award Fee

4.0 Performance Objectives and Standards

The Contractor shall be required to furnish all plant, labor, materials and equipment necessary to meet the performance objectives and standards identified in Table 1 below. The current status of the remediation efforts for each site can be found in Attachment A "Installation and Site Information".

[Note: Table 1 may be specified by media type (e.g., Soil sites should be able to go to RC; Groundwater is more likely to be RIP]

Table 1: Performance Requirements Summary.

Performance Objective	Performance Standards
 Approved Project Management Plan (PMP) and Quality Assurance Surveillance Plan (QASP); Draft within 30 days of Task Order award Final within 30 days of receipt of COR comments on the draft PMP 	Army approval through the COR.

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Performance Objective	Performance Standards
Achieve Remedy in Place (RIP) at the following sites by [Date]: • [List of RIP Sites]	Compliance with the FFA and associated schedule [if applicable]
Upon achievement of RIP, perform Remedial Action (Operations) (RA(O)) at the above sites for the duration of the Task Order or until achievement of Response Complete (RC), whichever comes first. Upon achievement of RC, perform any necessary Long-Term Management (LTM) at the above sites for the duration of the Task Order.	Army approval through the Contracting Officer's Representative (COR) and Regulator approval or concurrence (e.g., receipt of documentation confirming RIP; approval of annual RA(O) reports; approval of RA(O) exit or ramp down strategy).
RA(O) includes development and implementation of an exit or ramp-down strategy for RA(O) activities at each site.	
Perform RA(O) at the following sites for the duration of the Task Order or until achievement of RC, whichever comes first: • [List of RA(O) Sites]	Army approval through the COR and Regulator approval or concurrence (e.g., approval of annual RA(O) reports; approval of RA(O) exit or ramp down strategy).
RA(O) includes development and implementation of an exit or ramp-down strategy for RA(O) activities at each site.	
Achieve RC at the following sites by [Date]: • [List of RC Sites]	Compliance with FFA and associated schedule [if applicable]
Upon achievement of RC, perform any necessary Long-Term Management (LTM) at the above sites for the duration of the Task Order.	Army approval through the COR and Regulator approval or concurrence (e.g., receipt of documentation confirming RC; approval of annual
LTM includes development and implementation of an exit or ramp-down strategy for LTM activities at each site.	LTM reports; approval of LTM exit or ramp down strategy).
Perform any necessary LTM at the following sites for the duration of the Task Order: • [List of LTM Sites]	Army approval through the COR and Regulator approval or concurrence (e.g., approval of annual LTM reports; approval of LTM exit or ramp down
LTM includes development and implementation of an exit or ramp-down strategy for LTM activities at each site.	strategy).

Performance Objective	Performance Standards
For all remedies, optimize capital and long-term costs.	Acceptance by the COR that the Contractor has demonstrated that the proposed remedy represents the lowest 30-year present worth cost to the Army, and is acceptable to the regulators.
Complete all CERCLA 121(c) reviews required for the sites identified above, for the duration of the Task Order. Correct any deficiencies noted in the CERCLA 121(c) reviews. Consolidate CERCLA 121(c) reviews into a single installation-wide review conducted at the conclusion of the Task Order.	Army approval through the COR and Regulator approval or concurrence (e.g., formal documentation accepting the reviews and any corrections).
[Additional installation-specific performance objectives, such as "Achieve levels of <2ppb RDX at the identified point of compliance."]	Army approval through the COR and Regulator approval or concurrence (e.g., documentation acknowledging that objective was achieved in a manner acceptable to Army and Regulators).

Remedy in Place, Remedial Action (Operations), Response Complete, and Long-Term Management are terms used for the Defense Environmental Restoration Program. These terms are defined in Attachment D.

5.0 Project Management Requirement(s)

This Task Order incorporates all the Project Management requirements established in Section C.4.1.1 through C.4.1.13 of the basic contract (e.g., Project Management Plan, Project Schedule, Status Reports and Milestone Presentations, Environmental Requirements, Health and Safety Requirements, Quality Control Testing, Project Repository and Administrative Record, Regulatory Involvement, Public Involvement, Additional Site Plans, Project Stakeholders, and Deliverable Requirements), in addition to the following:

5.1 Project Management Plan

The Contractor shall develop and maintain a detailed Project Management Plan (PMP) in accordance with the requirements of Section C.4.1.1.1 of the basic contract. The draft PMP shall be due within thirty (30) days of Task Order award. The final PMP shall be due within 30 days of receipt of COR comments on the draft PMP. The draft PMP and subsequent revisions shall be subject to Army review and approval, through the COR. A payment milestone will be established for Army approval of the final PMP through the COR. As part of the PMP, the contractor will identify a means for providing status reports to the Army COR in accordance with Section C.4.1.3 of the basic contract.

5.2 Project Schedule

As part of the PMP, the Contractor shall develop and maintain a Resource-Loaded Schedule that fully supports the technical approach and outlines the due dates and cost expenditure percentages for all milestones and payable deliverables in accordance with Section C.4.1.2 of the basic contract. It is the Army's intent to make all payments after verification of progress in accordance with this schedule. Unless otherwise noted in Table 1, all performance objectives must be completed within the allowable Task Order period of performance, provided all Task Order options have been exercised.

5.3 Milestone Presentations

Milestone presentations shall be made in accordance with the requirements of Section C.4.1.4 of the basic contract. At the COR's request, the Contractor may also make milestone presentations to the other project stakeholders, consistent with the applicable regulatory drivers listed in Section 1.0 of this Task Order, to show achievement of the performance objectives. This includes participation in annual Installation Action Plan (IAP) meetings, if requested by the COR. Certification and approval of project milestones will be made in accordance with Section C.6.1 of the basic contract.

5.4 Environmental Requirements

The Contractor shall comply with all Environmental Requirements identified in Section C.4.1.5 of the basic contract.

[The following paragraph will be installation-specific.] The Army has/will establish/ed a Standard Operating Procedure and a Geographic Information System (GIS)-based tracking system to ensure the Land Use Controls (LUCs) are enforced. The LUCs will/have been incorporated into the post-wide Master Plan and compliance with LUCs will be reported in the Monitoring Reports for each site. The LUC policy applies to all units and activities, Military and Civilian Support Activities, tenant organizations and agencies and Government and Civilian Contractors. Compliance with the LUC policy is required in all RA(O), LTM and CERCLA 121(c) review activities.

5.5 Health and Safety Requirements

The Contractor shall implement a written Safety and Health Program and Site Safety and Health Plan (SSHP) in accordance with Section C.4.1.6 of the basic contract.

5.6 Quality Management

Since the technical approach for this PBC shall be developed by the Contractor, the Contractor shall also develop a draft Quality Assurance Surveillance Plan (QASP). The draft QASP shall be submitted with the proposal using the QASP template provided in Attachment E. The final QASP shall be submitted with the PMP. The QASP should highlight key quality control activities or events that the COR will use to determine when Army (COR or Contracting Officer (KO)) inspections can be conducted to assess progress toward milestones. Activities identified in the QASP should be appropriately coded in the project schedule to allow for planning of QA

inspections. The Final QASP will be approved by the COR and provided to the Contractor within thirty (30) days of receiving the final approved PMP.

5.6.1 Quality Control Testing

The Contractor shall comply with all Quality Control Testing requirements identified in Section C.4.1.7 of the basic contract. Additionally, the Contractor may establish an on-site testing laboratory at the project site if determined necessary by the Contractor. However, on-site testing shall meet the requirements of USEPA, specific state regulator requirements, and all requirements of the DoD Quality Systems Manual, Version 2.

5.7 Project Repository and Administrative Record

A project repository for the Installation is currently maintained at [Location]. The Administrative Record for the Installation is currently maintained at [Location].

The Contractor shall comply with Section C.4.1.8 of the basic contract. Additionally, the Contractor shall update at least monthly a multimedia (i.e., both paper and electronic format) project repository of all project-related information to ensure that pertinent documentation and data are available for project reviews, and to provide a clear record of the PBC approach to support final decisions and remediation completion. The Contractor shall also update the repositories for the Administrative Record for CERCLA activities, as needed.

5.7.1 Army Environmental Database and Environmental Restoration Information System

The Contractor shall comply with all applicable requirements for data validation and submission for Army Environmental Databases and Environmental Restoration Information System (ERIS) in accordance with Section C.4.1.8.2 of the basic contract. Once a site identified in this Task Order has achieved Response Complete (i.e., appropriate documentation is finalized), the Contractor shall be responsible for providing the COR with the data and documentation necessary for the closeout of each site from the Army Environmental Database - Restoration Module (AEDB-R) and/or Army Environmental Database - Compliance Cleanup (AEDB-CC).

5.8 Additional Site Plans

Prior to beginning any field work the Contractor shall prepare any additional plans or documents (e.g., sampling and analysis plans, quality assurance project plan, waste minimization plans, health and safety plans) consistent with Section C.4.1.11 of the basic contract, the applicable regulatory drivers listed in Section 1.0 of this Task Order, and any other agreements, orders, or regulations that apply to the Installation and sites. These plans and documents shall be subject to Army review and approval, through the COR.

5.9 Project Stakeholders

For the purposes of this Task Order, project stakeholders pursuant to Section C.4.1.12 of the basic contract include the Army, [Regulatory Agencies], and the Restoration Advisory Board (RAB)[If applicable]. Required level of involvement may differ from site to site and the Contractor shall be responsible for obtaining comments with appropriate approval or

present organizational conflicts of interest relating to the work in each task order. In the same statement, the Contractor shall provide the information required in the following paragraph to assure the Government that the conflicts of interest have been mitigated and/or neutralized to the maximum extent possible. If a conflict of interest is discovered after task order award, the Contracting Officer will make a decision whether to terminate or rescind the task order and/or contract at that time.

5.10.2 Potential Conflicts of Interest. This request for proposals is open to any offeror to compete as a prime contractor, subcontractor or in any teaming arrangement. In order to avoid any organizational conflicts of interest, or even the appearance of any organizational conflicts of interest, any contractor performing environmental services work at the follow-on installation(s) under each task order will need to avoid, neutralize and/or mitigate -- prior to task order award - significant potential conflicts of interest that may prejudice effective competition. The Contracting Officer has determined that at a minimum contractors currently performing work on the identified installation(s) under each task order must ensure that all data pertaining to contamination at the sites compiled by or in the possession of such contractors shall be made available to all potential contractors in a timely fashion to the maximum extent possible by providing such data in to a data depository.

6.0 Installation and Site Information

This section is intended to provide the Contractor with general site background information to assist in the Contractor's identification of the specific sites and corresponding documentation/existing reports. The Army believes the information presented below is accurate. However, if there is a conflict between this information and other site documentation (the existing reports), the Contractor is solely responsible for reviewing all available information and forming their independent, professional conclusions/interpretation of site conditions and requirements to meet the objectives of this PWS. The following information is not intended as a substitute for complete analysis of technical data available. Nor is it intended to be a guide on how the Contractor should address achievement of the performance objectives/standards.

6.1 Installation Setting and Status

[Installation-specific background information inserted here.]

The following provides a description of the current site status for each of the sites identified in this PWS. These descriptions are based on the best information at the disposal of the Army, site conditions may have changed, and it is the responsibility of potential Contractors to attend the site visit, research, investigate, and reach their own conclusions regarding site conditions.

6.2 [Site Name]

Site Information

[Site-specific information inserted here.]

Most Recent Documentation

7.0 Key Personnel Requirements

The Government requires that the following positions, at a minimum, be designated as "key personnel", subject to the terms and conditions for such set forth in Section C.5 and H of the basic contract. [select at least one from this list or contact the KO for other available selections]

PERSONNEL
[TBD]

8.0 Performance:

- 8.1 Period: [enter estimated total period of performance inclusive of options]
- 8.2 Primary Location: [enter installation, city and state]
- 8.3 Basic and Optional Requirements: [Indicate which individual contract line items will be ordered upon award (e.g., basic CLINs). All other line items will be designated as "Option". Note: You will need to prepare and provide a recommended CLIN structure for pricing purposes in order to address this issue.]

9.0 Other Requirements

- 9.1 Government Property
- 9.1.a Government-Furnished Property (and Resources)

This Task Order incorporates all the Additional Requirements established in Section C.6.3 of the basic contract, in addition to the following:

[list all known Government-furnished property here]

In addition to the Government-furnished resources identified herein, the Army, through the COR, shall also make available the following resources to the Contractor:

- All Army-owned property used for remediation purposes. This property must be
 maintained by the Contractor in accordance with applicable maintenance
 requirements and may not be replaced by the Army should new equipment be
 required.
- 9.1.b Contractor-Furnished and/or Acquired Property (and Resources)

This Task Order incorporates all the Additional Requirements established in Section C.6.4 of the basic contract, in addition to the following:

[list all known equipment and other material resources required of the contractor here]

• The provision and cost of the utilities associated with implementation of remedies, including installation of individual meters for necessary utilities.

In addition to the contractor-furnished equipment and resources identified herein, the Contractor shall also be responsible for the following:

- All waste generated under this Task Order.
- Any other necessary resources needed to achieve the performance objectives.

9.2 Contractor's Guarantee

The following definitions apply to this Task Order pursuant to Section C.6.5 of the basic contract: [Note: The following definitions may be changed to remove site-specific guarantees for RA(O)/LTM activities.]

- "Project Price" for each site identified in this Task Order will be equal to the approved proposed price for achieving RIP and/or RC and performing RA(O) and/or LTM. The Project Price payment will be tied to one or more project milestones.
- "Guarantee Limit" is equal to at least twice the sum of all of the Project Prices for the sites identified in this Task Order.
- "Contractor's Project Costs" are defined as those costs incurred by the Contractor (including
 costs covered by insurance) in executing the work required to achieve RIP and/or RC and
 perform RA(O) and/or LTM, for the sites identified in this Task Order.

9.3 Insurance Specifications

[If no insurance to be included with the Task Order, state, "No Environmental Insurance (EI) in the form of Remediation Stop Loss Insurance (Clean Cost Cap or CCC) is required for this Task Order." And delete remaining text in this section. If insurance to be included with the Task Order, include text as follows]

This Task Order supersedes the requirements established in Section C.6.6 of the basic contract as follows:

The Contractor shall procure Environmental Insurance (EI) in the form of Remediation Stop Loss Insurance (Clean Cost Cap or CCC) and thereafter carry and maintain the EI coverage in full force and effect over the duration of the Task Order, to include options, at all sites identified in this Task Order as requiring EI. The EI shall meet or exceed the following objectives:

1. [Note: This may be changed based site-specific requirements.] Provides coverage applicable to the sites, performance objectives, and performance standards identified in Table 1 of this Task Order as requiring insurance, and confirms that all the obligations assumed under this Task Order are incorporated into the definition of the insured "remedial plan" as specified in the insurance endorsements.

[INSTALLATION]

- 2. Provides coverage at a minimum, equal to the Guarantee Limit of the Task Order, minus insurance, travel, and PMP costs and costs for any site locations excluded from the award or not requiring insurance.
- 3. Coverage to include a Waiver of Subrogation, as applicable, for claims associated with matters and scope items addressed in this Task Order that the Contractor or insurance company may have against the Army.
- 4. Coverage provided from a carrier rated A.M. Best's A- (Excellent) and Financial Size Category (FSC) IX or better.
- 5. Requires that technical and schedule progress reports to be provided to the Army on the same schedule that they are provided to the insurance carrier.
- 6. Contains no "War Exclusion" or contains a limited war exclusion that excludes cleanup costs caused solely by a hostile or violent act of war after the inception date.
- 7. Provides the Army the primary right to assign the policy to a replacement contractor acceptable to the insurance company should the Contractor default or otherwise be unable to meet the Task Order requirements.

The Contractor must provide proof of insurability with the submitted proposal. Proof of insurability will be in the form of a draft policy specifying terms and conditions (e.g., all endorsements) in sufficient detail to allow evaluation of:

- The identity of the insurance companies offering to insure the contractor;
- The limits of liability for each coverage part;
- The premium for each policy or coverage part;
- The amount of the self-insured retention, buffer layer (if applicable), and /or co-insurance:
- The policy length (term) for each policy;
- The policy forms, and proposed endorsements;
- The insured scope of work or definition of the insured remedial plan;
- A list of the documents provided to the underwriter as part of the application for insurance:
- The name of the insurance broker and the full compensation of the insurance broker
 including any and all commissions, fees, incentive payments, reinsurance commissions or
 wholesale brokerage commissions earned by any firm within the insurance brokers
 economic family disclosed as a separate cost item, even if these costs are incorporated
 into the premiums of the insurance policies being provided;
- How, in the event of Contractor default, its provisions will ensure that this Task Order is completed to the satisfaction of the Army.
- Any exclusions to be added to these polices by endorsement along with an explanation of the rationale behind attaching the exclusion; and
- Any deviations from these insurance specifications with explanation using a checklist as to why the specification was not met, or why the deficiency in question is not material to the CCC coverage to be provided.

Within ten (10) workdays of Task Order award, the Contractor shall provide a quote letter containing a policy with endorsements to KO/COR. The KO and COR shall have the right to review the quote letter to ensure consistency with the objectives as listed above. The Government reserves the right to withhold or adjust payment for the insurance policy if the final bound policy terms and conditions are changed from the draft policy terms and conditions presented in the Contractor's proposal submittals, or if the policy premium is different from the amount specified in the Task Order Award. The Contractor is responsible for paying the costs

associated with all insurance requirements, including but not limited to the self-insured retention and co-pays. Contractors should note that the Army will allow the first payment milestone to include necessary insurance costs (e.g., insurance premium).

A Certificate of Insurance shall be furnished to the contracting officer (KO) on an annual basis evidencing the above insurance coverage is bound.

9.4 Stop Work

This Task Order supersedes the requirements established in Section C.6.10 of the basic contract as follows:

The Contractor, authorized Installation personnel, and the COR have the responsibility to stop work immediately if the work is considered to be a serious threat to the safety or health of workers, other personnel, or to the environment. Authorized Installation personnel include Installation safety officers, Environmental Division personnel, and command personnel with responsibility for overall Installation operations. When work is stopped due to a hazard/threat to worker safety, health, or the environment, the situation and resolution must be documented and submitted to the KO. Work must be stopped whenever chemical and biological warfare agents or radiological materials are encountered.

9.5 Environmental Responsibility Considerations

This Task Order incorporates all the Environmental Responsibility Considerations established in Section C.6.11 of the basic contract

9.6 Inspections

The Army technical experts will independently review Contractor work to ensure compliance with all applicable requirements.

CERCLA 121(c) reviews conducted during the duration of the Task Order constitute a Government Inspection of Services. The Contractor will correct any problems and/or deficiencies noted by during RA(O), LTM or within a CERCLA 121(c) review.

If re-performance is required to correct the deficiencies noted during RA(O), LTM or within a CERCLA 121(c) review, the Contractor may be required to modify the existing remedy, implement a contingent remedy, modify the monitoring parameters and/or frequency, or take other activities deemed necessary to correct the deficiencies. Corrective action must be certified and approved consistent with Section C.6.1 of the basic contract. If the Contractor is conducting RA(O) or LTM, or completing a CERCLA 121(c) review, for a remedy that they did not implement or modify (i.e., an on-going pump and treat system inherited as part of the PBC scope), correction of substantive remedy deficiencies noted during RA(O), LTM or within a CERCLA 121(c) review which may require modification of that remedy are considered outside the scope of this Task Order effort.

9.7 Organizational Conflicts of Interest

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- 9.6.1 Disclosure. The Contractor shall provide a disclosure statement with its task order proposal, which concisely describes all relevant facts concerning any past or present organizational conflicts of interest relating to the work in each task order. In the same statement, the Contractor shall provide the information required in the following paragraph to assure the Government that the conflicts of interest have been mitigated and/or neutralized to the maximum extent possible. If a conflict of interest is discovered after task order award, the Contracting Officer will make a decision whether to terminate or rescind the task order and/or contract at that time.
- 9.7.2 Potential Conflicts of Interest. This request for proposals is open to any offeror to compete as a prime contractor, subcontractor or in any teaming arrangement. In order to avoid any organizational conflicts of interest, or even the appearance of any organizational conflicts of interest, any contractor performing environmental services work at the follow-on installation(s) under each task order will need to avoid, neutralize and/or mitigate -- prior to task order award significant potential conflicts of interest that may prejudice effective competition. The Contracting Officer has determined that at a minimum contractors currently performing work on the identified installation(s) under each task order must ensure that all data pertaining to contamination at the sites compiled by or in the possession of such contractors shall be made available to all potential contractors in a timely fashion to the maximum extent possible by providing such data in to a data depository.

9.8 Privacy and Security

This Task Order incorporates all the Additional Requirements established in Section C.6.8 of the basic contract, in addition to the following:

[include narrative explanation of installation access/security requirements or provide policy/procedure references and post documents on the webpage]

9.9	Securit	eurity/Classification: [select as appropriate]		
		Classified (Le	vel)	
		DD Form 254	attached: Yes No No	
		Unclassified		
9.10	Applic	able Labor Law	vs [select as appropriate – consult http://www.wdol.gov/]	
9.10.a	Service	vice Contract Act Not Applicable		
			Applicable SCA Wage Determination	
			_	
9.10.b	Davis 1	Bacon Act	Not Applicable	
			Applicable DBA Wage Determination	
			Template revised as of April 11, 2006	

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9.11 Travel

Travel to/from the Installation and to other CONUS locations for such purposes as to attend meetings, briefings and/or presentations may be required incidental to this remedial action, the costs for which shall be included in the total price for the Task Order pursuant to Section C.6.2 of the basic contract.

10.0	Contracting	Officer's Re	presentative	can	be inserted	d upon	issuance	of tas	k orde	er
------	-------------	--------------	--------------	-----	-------------	--------	----------	--------	--------	----

Name:
Organization:
Address:
Address:
City, State, Zipcode:
Telephone:
Facsimile:
Email:

Attachment 4.3: IDIQ Generic PBC Performance Work Statement USAEC Performance-Based Contracting Guidebook [INSTALLATION]

Attachment A

Installation and Site Information

The following information is provided to assist in the understanding of each site identified for remediation in this work statement. The Army believes the information presented below is accurate. However, if there is a conflict between this information and other site documentation (the existing reports), the Contractor is solely responsible for reviewing all available information and forming their independent, professional conclusions/interpretation of site conditions and requirements to meet the objectives of this Task Order. This information is <u>not</u> intended as a substitute for complete analysis of technical data available, nor is it intended to be a guide on how the Contractor should address achievement of the performance objectives/standards.

Installation Setting and Status

[Installation-specific background information inserted here.]

The following provides a description of the current site status for each of the sites identified in this Task Order. These descriptions are based on the best information at the disposal of the Army, site conditions may have changed, and it is the responsibility of potential Contractors to attend the site visit, research, investigate, and reach their own conclusions regarding site conditions.

[Site Name]

Site Information

[Site-specific information inserted here.]

Most Recent Documentation

• [List of most recent documentation for site inserted here.]

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Attachment B: Reference Documents

These documents are available as follows:				
	recorded on compact disk upon request (Point of Contact:)			
	at the following website:			
The Army believes this documentation represents the most recent and appropriate documentation available for the Installation and sites identified in this Task Order.				
Additional documentation is available through [other sources]. Specific documents may be made available following a request, if the documentation can be distributed in a timely manner. Electronic format is not guaranteed.				
Table 3: Available Reference Documents.				
Title		Author	Date	
[Insert list of	f all available documents]			

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Attachment C: List of Acronyms

ARAR Applicable or Relevant and Appropriate Requirement

CAIS Chemical Agent Identification Sets

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

COR Contracting Officer's Representative

CWM Chemical Warfare Materiel

DERP Defense Environmental Restoration Program

DMM Discarded Military Munitions
FAR Federal Acquisition Regulation
FFA Federal Facility Agreement
GIS Geographic Information System

IC Institutional Control

IRIS Integrated Risk Information System

KO Contracting Officer
LTM Long-Term Management
MCL Maximum Contaminant Level

MEC Munitions and Explosives of Concern

NCP National Oil and Hazardous Substances Contingency Plan

NPL National Priorities List
PMP Project Management Plan
PWS Performance Work Statement

QA Quality Assurance

QASP Quality Assurance Surveillance Plan

RAB Restoration Advisory Board RA(O) Remedial Action (Operations)

RC Response Complete

RCRA Resource Conservation and Recovery Act

RDX Royal Demolition eXplosive

RfD Reference Dose RIP Remedy In Place ROD Record of Decision

SARA Superfund Amendments and Reauthorization Act

TNT Trinitrotoluene

USEPA United States Environmental Protection Agency

UST Underground Storage Tank
UXO Unexploded Ordnance

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Attachment D: Definitions

Contractor's Project Costs: [Note: The following definitions may be changed to remove site-specific guarantees for RA(O)/LTM activities.] Costs incurred by the Contractor in executing the work required to achieve RIP and/or RC, and perform RA(O) and/or LTM (if required), for the sites identified in this Task Order.

Deliverables: Documentation or data that support the completion of milestones or achievement of the performance objectives identified in this Task Order.

Guarantee Limit: At least twice the sum of all of the Project Prices for the sites identified in this Task Order.

Long-Term Management (LTM): The remedial phase including maintenance, monitoring, record keeping, remedy reviews, etc. initiated after response (removal or remedial) objectives have been met (i.e., after Response Complete).

Milestones: Significant events or activities that occur in the course of the Contractor achieving the performance objectives identified in this Task Order.

Munitions and Explosives of Concern (MEC): This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks, means Unexploded Ordnance (UXO), as defined in 10 U.S.C. 2710 (e) (9); Discarded Military Munitions (DMM), as defined in 10 U.S.C. 2710 (e) (2); or Explosive munitions constituents (e.g., Trinitrotoluene (TNT), Royal Demolition eXplosive (RDX)) present in high enough concentrations to pose an explosive hazard.

PMP Documents: The original PMP (including project schedule), revisions, and status reports.

Project Documents (CERCLA): Documentation and data required by CERCLA remediation and RA(O) and/or LTM activities. These documents include the additional site plans referenced in Section Section 5.0 of this Task Order and Section C.4.1.11 of the basic contract.

[If applicable] *Project Documents (UST, RCRA)*: Documentation and data required by underground storage tank (UST) or RCRA remediation and RA(O) and/or LTM activities.

Project Price: [Note: The following definitions may be changed to remove site-specific guarantees for RA(O)/LTM activities.] The approved proposed price for achieving RIP and/or RC, and perform RA(O) and/or LTM (if required), the payment of which will be tied to one or more project milestones.

Project-related information: All previous environmental restoration documentation of a technical nature developed by the Army and previous Army contractors and subcontractors during their work at the sites specified in this Task Order, and all the documentation developed by the Contractor in order to achieve the performance objectives specified in this Task Order.

Remedial Action (Operations) (RA(O)): The remedial phase during which the remedy is in place and operating to achieve the cleanup objective identified in the Record of Decision (ROD) or

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other formal decision document. Any system operation (long-term operations) or monitoring (long-term monitoring) requirements during this time are considered RA(O).

Remedy In Place (RIP): A final remedial action has been constructed and implemented and is operating as planned in the remedial design. An example of a remedy in place is a pump-and-treat system that is installed, is operating as designed, and will continue to operate until cleanup levels have been attained. Because operation of the remedy is ongoing, the site cannot be considered Response Complete.

Resource-loaded Schedule: A schedule of due dates and cost expenditure percentages for all milestones and payable deliverables.

Response Complete (RC): The remedy is in place and required RA(O) have been completed. If there is no RA(O) phase, then the remedial action—construction end date will also be the RC date. If no remedial action is required at a site (based on agreement with the Army and appropriate regulators), documentation of "No Further Action" will constitute Response Complete. Consistent with CERCLA, the Defense Environmental Restoration Program, and applicable Executive Orders and regulations, environmental response activities under the Installation Restoration program categories shall be considered "response complete" when all the response objectives identified in an appropriately signed ROD or other formal decision document have been achieved and documented.

- If environmental restoration activities allow for unrestricted use of the property, response
 complete is when there is verification of the achievement of the response objectives
 detailed in the ROD or other formal decision document.
- If environmental restoration activities do not allow for unrestricted use of the property, response complete occurs when: 1) There is verification of the achievement of the response objectives detailed in the ROD or other formal decision document; and 2) At least one subsequent review to ensure that the response action has remained effective and continues to be protective of human health and the environment as defined by the response objectives detailed in the ROD or other formal decision document has occurred; and 3) At least five years have elapsed.

Unforeseen environmental issues: include unknown and/or varied concentrations of contaminants at cleanup sites (off-installation areas included) identified in this Task Order, but not unknown sites (e.g., sites not identified in this Task Order).

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Attachment E: Quality Assurance and Surveillance Plan (QASP) Template

1.0 Overview

This performance-based Quality Assurance Surveillance Plan (QASP) sets forth the procedures and guidance that the Contract Officer Representative (COR) will use in evaluating the technical performance of the Contractor in accordance with the terms and conditions of the Task Order. The QASP objective is to define Government procedures to be used to verify that appropriate performance and quality assurance methods are used in the management of this performance-based contract. The purpose of the QASP is to assure that performance of specific activities and completion of milestones are accomplished in accordance with all requirements set forth in the Task Order.

This QASP describes the mechanism for documenting noteworthy accomplishments or discrepancies for work performed by the Contractor. Information generated from COR's surveillance activities will directly feed into performance discussions with the Contractor. The intent is to ensure that the Contractor performs in accordance with performance metrics set forth in the Task Order documents, the Army receives the quality of services called for in the Task Order, the Army only pays for the acceptable level of services received.

The QASP details how and when the COR will monitor, evaluate, and document Contractor performance on the Task Order. The QASP is intended to accomplish the following:

- 1. Define the role and responsibilities of participating Army officials.
- 2. Define the key milestones/deliverables that will be assessed.
- 3. Define acceptable, superior, and unacceptable performance standards for key milestones/deliverables.
- 4. Describe the surveillance methodology that will be employed by the Army in assessing the Contractor's performance.
- 5. Describe the surveillance documentation process and provide copies of the form that the Army will use in evaluating the Contractor's performance.
- 6. Outline payment and corrective action procedures.

This QASP will be revised and finalized by the COR and Contractor upon completion of the Project Management Plan (PMP).

2.0 Roles and Responsibilities of Army Officials

The Contracting Officer's Representative (COR) is responsible for technical administration of the project and assures proper Army surveillance of the Contractor's performance. The COR is responsible for monitoring, assessing, recording, and reporting on the technical performance of the Contractor on a day-to-day basis.

The Contracting Officer (KO) has overall responsibility for overseeing the Contractor's performance. The KO is responsible for the day-to-day monitoring of the Contractor's performance in the areas of Task Order compliance, and Task Order administration; reviewing the COR's assessment of the Contractor's performance; and resolving all differences between the COR's assessment and the Contractor's assessment of performance. It is the KO that assures the Contractor receives impartial, fair, and equitable treatment under the Task Order.

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The KO is ultimately responsible for the final determination of the adequacy of the Contractor's performance.

The COR and KO may call upon the technical expertise of other Army officials and subject matter experts (SME) as required. These Army officials/SMEs may be called upon to review technical documents and products generated by the Contractor. Contracting Agency representatives will also conduct review of Task Order documentation such as invoices, monthly status reports, and work plans.

3.0 Key Milestones/Deliverables to be Assessed

At a minimum, the following milestones and associated deliverables will be evaluated in accordance with this QASP (Based on milestones/deliverables in the Task Order):

- Completion of the final Project Management Plan (PMP)
- Achievement of performance objective at each site specified in the Task Order
- Completion of annual monitoring report(s)
- Completion of the final exit or ramp-down strategy for LTM/LTO
- Completion of final remedy review(s)
- Correction of deficiencies noted in the remedy review(s)
- Approved interim milestones identified in the final PMP

Additionally, the Army will evaluate performance on the key quality control activities and events specified by the Contractor through their Quality Assurance (QA) strategy (see Task Order Section 5.6: Quality Management).

4.0 Performance Standards for Key Milestones/Deliverables

Since cost is fixed in the PBCs utilized by the Army, the Contractor's performance will be evaluated by assessing the key milestones/deliverables described above according to two standards: quality and timeliness. For each of these performance standards, the COR will assign one of three ratings of the Contractor's performance: superior, acceptable, or unacceptable (as shown in Table 1). Note: These performance standards may be modified to meet the needs of a specific installation.

Table 1 Performance Standards (Established and Defined by the Contractor in Conjunction with the COR)

Performance	Superior	Acceptable	Unacceptable
Standard	Performance	Performance	Performance
Quality	Contractor exceeds the requirements in the Task Order for the milestone/ deliverable. Deliverables /milestones are approved after one round of comments from Army and	Contractor meets the requirements in the Task Order for the milestone/ deliverable. Deliverables /milestones are approved with two rounds of comments received from Army	Contractor does not meet the requirements in the Task Order for the milestone/ deliverable. Deliverables/milestones require more than two rounds of Army and Regulators

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	Regulators and no revisions are required.	and Regulators and no further revisions are required.	comments before being approved.
Timeliness	Contractor provides acceptable milestone/deliverable ahead of the schedule outlined in the PMP.	Contractor provides milestone/deliverable according to the schedule outlined in the PMP.	Contractor provides milestone/deliverable behind the schedule outlined in the PMP

If a milestone/deliverable is rated as being of unacceptable quality at the time that the PMP deadline for the milestone/deliverable expires, the milestone/deliverable will automatically receive an unacceptable rating for timeliness. At no point will a milestone/deliverable receive an acceptable or superior rating for timeliness if it is rated as being of unacceptable quality. Overall acceptable performance on a milestone/deliverable requires ratings of acceptable or superior for both the quality and timeliness standards.

5.0 Surveillance Methodology

The surveillance methods listed below will be used in the administration of this QASP.

100% Inspection

At the completion of all key milestones and deliverables, performance will be evaluated through 100% inspection (e.g., document review). The COR will document performance for each completed milestone/deliverable prior to payment, as described in Section 6.0.

Periodic Progress Inspection

At the COR's discretion, periodic inspections may be conducted to evaluate progress toward key milestones and deliverables. The COR may complete a periodic progress inspection if s/he believes that deficiencies exist that must be addressed prior to milestone/deliverable completion. While corrective action or re-performance will be required if necessary, the Contractor will not be financially penalized for unacceptable performance recorded in periodic progress reports, provided that final performance evaluation of the milestone/deliverable is deemed acceptable.

Customer Feedback

Additional feedback will be obtained through random customer complaints. To be considered valid, customer complaints must set forth clearly and in writing the detailed nature of the complaint, must be signed, and must be forwarded to the KO. The KO will maintain a summary log of all formally received customer complaints as well as a copy of each complaint in a documentation file.

6.0 Surveillance Documentation

The COR will use a performance evaluation form to record evaluation of the Contractor's performance for each milestone and deliverable in accordance with the methodology described in Sections 4.0 and 5.0. The COR must substantiate, through narratives in the form, all superior and unacceptable ratings. Performance at the acceptable level is expected from the Contractor. At a minimum, the evaluation form will indicate actual and scheduled delivery times and number of reviews required to achieve the final product.

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The COR will forward copies of all completed performance evaluation forms to the KO and Contractor within one week of performing the inspection. When a milestone/deliverable receives an overall unacceptable rating, the Contractor will explain, within 15 days, in writing to COR why performance was unacceptable, how performance will be returned to acceptable levels, and how recurrence of the problem will be prevented in the future.

The KO will review each performance evaluation form prepared by the COR. When appropriate, the KO may investigate further to determine if all the facts and circumstances surrounding the event were considered in the COR opinions outlined on the form. The KO will immediately discuss any unacceptable rating with the Contractor to assure that corrective action is promptly initiated.

At the end of every year, the COR will prepare a written report for the KO summarizing the overall results of his/her surveillance of the Contractor's performance during the previous 12 months. This report will become part of the formal QA documentation.

The COR will maintain a complete QA file. This file will contain copies of all performance evaluation forms and any other related documentation. The COR will forward these records to the KO at termination or completion of the Task Order.

7.0 Payment and Corrective Action

Full payment for a milestone/deliverable will be provided upon verification of overall acceptable performance, as rated on quality and timeliness. This verification will be recorded in a performance evaluation form submitted to the KO specifying overall Contractor performance as either acceptable or superior for the milestone/deliverable.

If a milestone/deliverable receives an unacceptable rating for the quality performance standard, re-performance is required until the milestone/deliverable receives an acceptable rating. This reperformance is required regardless of cost or schedule constraints that may result from the unacceptable performance, unless the KO has opted to terminate the Task Order.

Table 2 summarizes the minimum key elements planned for the QASP. The final QASP will be developed with the COR and the contractor and will be based on the final PMP.

Additional Government surveillance activities may include, but are not limited to, the following:

- 1) Work plan review and approval
- 2) Oversight of drilling, field sampling activities
- 3) Oversight of all waste management functions/responsibilities
- 4) Review of all waste management documentation
- 5) Separate/split laboratory OA samples
- 6) Review and approval of all access agreements associated with off-site areas
- 7) Review and approval of meeting minutes from RAB/BCT meetings
- 8) Review and approval of all deliverables to regulatory agencies
- 9) Review and approval of FS options to be considered
- 10) Review of quality control documentation
- 11) Review of project safety record

Attachment 4.3: IDIQ Generic PBC Performance Work Statement USAEC Performance-Based Contracting Guidebook [INSTALLATION] 12) Adherence to the approved work plan

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Table 2 Performance Objectives, Acceptance Criteria, and Monitoring Methods

Performance Objectives (from Table 1	Performance Standard (from	Acceptable	Monitoring Method
in Task Order)	Table 1 in Task Order)	Quality Levels	_
Approved Project Management Plan (PMP) and Quality Assurance Surveillance Plan (QASP): • Draft within 30 days of Task Order award • Final within 30 days of receipt of COR comments on the draft PMP	1. Army approval through the COR	Acceptable or superior performance, as defined in the QASP	100% inspection of milestones / deliverables associated with objective • Interim Payment schedule included in the PMP. • Resource loaded scheduled included in the PMP • Project Status reports provided as proposed

SAMPLE

[INSTALLATION]

QUALITY ASSURANCE MONITORING FORM

Date:/
Work Task (Milestone/Activity):
Survey Period:/ through/ Method of Surveillance: COR Review
Evaluation of Contractor's Performance:
D'Adduction
Corrective Action Required: Yes No
Narrative Discussion of Contractor's Performance During Survey Period:
Discussion

[INSTALLATION]

CORRECTIVE ACTION FORM FOR QASP

1) Work Task (Milestone/Activity):				
2) Survey Period:/ through/				
3) Description of the Failure/Deficiency that Precipitated the Corrective Action:				
4) Description of the Criterion that the Failure/Deficiency was Evaluated Against:				
2 coe.ipton				
5) Personnel Involved in the Identification of the Failure/Deficiency, Determination of the Appropriate Corrective Action, Approval of the Corrective Action, and Implementation of the Corrective Action:				
6) Description of the Corrective Action that was Required:				
Description				
7) Date/Time of Implementation of the Corrective Action:/				
Description				
8) Follow-Up Information to Prevent Recurrence of Failure/ Deficiency (i.e., Need For Revision of Procedures or Specifications):				

9) Personnel Responsible for Follow-Up Work:

[INSTALLATION]

10) Planned Date for Follow-Up Surveillance:/
11) Other Notes:
Other

Attachment 4.4: Template Comment/Response Matrix USAEC Performance-Based Contracting Guidebook [INSTALLATION] PBC PWS Comment/Response Matrix

Commentor	Comment	Resolution
Name of	Comment (verbatim)	How comment was addressed or why it was not addressed.
Commenter		

Attachment 4.2: Template Comment/Response Matrix USAEC Performance-Based Contracting Guidebook [INSTALLATION] PBC PWS Comment/Response Matrix

Commentor	Comment	Resolution

Attachment 4.2: Template Comment/Response Matrix USAEC Performance-Based Contracting Guidebook [INSTALLATION] PBC PWS Comment/Response Matrix

Commentor	Comment	Resolution

Attachment 4.2: Template Comment/Response Matrix USAEC Performance-Based Contracting Guidebook [INSTALLATION] PBC PWS Comment/Response Matrix

Commentor	Comment	Resolution

NOTE: Portions of the following attachment may contain information protected from disclosure under the Procurement Integrity Act, 41 USC 423 and Freedom of Information Act, 5 USC §552 and is therefore exempt from disclosure under applicable law.

Attachment 4.5: Example Technical Evaluation Criteria

If you require a copy to perform in an official capacity, please contact PBC.Team@aec.apgea.army.mil

Attachment 4.6: Generic Acquisition Plan USAEC Performance-Based Contracting Guidebook

ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT

ACQUISITION PLAN
FOR
[CONTRACT TYPE]
PERFORMANCE BASED CONTRACT

[INSTALLATION]

Acquisition Plan # [Number]

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PART A - ACQUISITION BACKGROUND AND OBJECTIVES

(1) STATEMENT OF NEED:

Senior Army leadership, through its April 2003 Cleanup Strategy and Strategic Plan, identified Performance-Based Contracting (PBC) as a preferred business strategy that incorporates the use of proven commercial sector practices and incentives in the environmental cleanup process. The belief is that the use of PBC for cleanup will significantly improve overall project performance and get the program to completion.

PBC is a contracting approach in which performance is judged against the desired outcome rather than the level of effort performed (generally referred to as cost plus fixed fee or time and materials contracts). PBC is designed to: ensure that contractors are provided flexibility to determine and implement the best approach to meet the Government's performance objectives; ensure that appropriate performance quality levels are achieved; and guarantee that payments are made to the contractors only for services that meet the agreed upon levels of quality and performance.

All aspects of the PBC acquisition are structured around the purpose of the work to be performed. The contract requirements are set forth in specific and objective terms with measurable outcomes as opposed to the manner by which the work is to be performed or through broad and imprecise statements of work.

The PBC program for Active Army installations was initiated in FY03 by the Army Chief of Staff for Installation Management (ACSIM). The ACSIM tasked the U.S. Army Environmental Center (USAEC) with the technical implementation of the PBC program. As such, USAEC has developed this Acquisition Plan in accordance with Federal Acquisition Regulation (FAR) Part 7.105, "Contents of Written Acquisition Plans."

The Army strategy is to prepare an option-based Request for Quotation (RFQ) to leverage funding for a PBC award of an estimated [number] year restoration effort at [Installation]. This contract will be [contract type] and will [not] require environmental insurance (EI) to cover potential cost overruns or unexpected conditions.

(2) APPLICABLE CONDITIONS:

The contractor must comply with all applicable and relevant state and federal environmental laws, regulations and DOD and Army policy. In addition, the contractor must fulfill the objectives of each task in a manner that is consistent with all previously agreed-upon cleanup guidance and schedules.

The contractor must abide by all specific operational restrictions and access restrictions imposed by [Installation].

(3) COST:

(i) Life Cycle Cost:

There will be one (1) award. An estimated [Contract Cost] will be distributed to the awardee over the life of the contract. If the contract capacity has to be increased in the future due to demand, USAEC may request an increase in the

contract capacity in the out-years. In the RFQ, the [Contracting Agency] may require offerors to submit other certified cost and pricing data.

USAEC has defined PBC estimates for the [Installation] Restoration Program for the out-years. These estimates are as follows:

FY05: approximately \$ [Cost] FY06: approximately \$ [Cost] approximately \$ [Cost] FY07: FY08: approximately \$ [Cost] approximately \$ [Cost] FY09: approximately \$ [Cost] FY10: approximately \$ [Cost] FY11: FY12: approximately \$ [Cost] approximately \$ [Cost] FY13: FY14: approximately \$ [Cost] FY15: approximately \$ [Cost]

(ii) Design-To-Cost:

Not Applicable (Service Contract)

(iii) Application of Should Cost:

Not Applicable (Service Contract)

(4) CAPABILITY OR PERFORMANCE:

This acquisition will be for commercial sector environmental remediation services to include: project management, site characterization/investigation, assessment of remedial action alternatives, environmental regulatory concurrence, remedy implementation, site management (i.e., long-term monitoring), and all associated tasks necessary to fulfill the contract. [The contract will require environmental insurance as a means to provide a guarantee against remediation cost overrun.] The contractor shall provide the necessary personnel, resources, and equipment to successfully complete requirements outlined in the contract within the stated period of performance. In consultation with the Army, the contractor shall identify the applicable requirements of federal, state, and local laws, regulations, and guidance and will perform the work in compliance with these applicable legal authorities.

In order for offerors to be considered for award, the offeror: 1) must possess and demonstrate the necessary professional management experience; 2) demonstrate ability to meet performance-based objectives under a firm fixed-price scenario; [3) demonstrate expertise in acquiring a wide range of environmental insurance products; 4) be financially sound with sufficient capital available to cover the insurance deductible and co-pay], and 5) possess the necessary skills to complete technically challenging environmental cleanup tasks.

(5) PERFORMANCE PERIOD REQUIREMENTS:

The contract will contain one (1) base year and [number] option years.

(6)	TRA	DE	OF	FS:
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Not Applicable

(7) RISKS:

Risks under this acquisition include the following:

(i) Cost Risks:

- 1. Because PBCs are often awarded before a final cleanup strategy has been selected and approved for a site, USAEC must make assumptions regarding the "most likely" remedy or remedies to be employed when developing the Independent Government Estimates (IGEs). As a result, it is possible that the IGEs may reflect costs that are not in line with the quoters' assumptions and proposed price. Therefore, the IGE could, in some cases, be significantly lower than submitted quotes. Under this scenario, it may not be advantageous to the Army to award the contract, thus affecting the schedule for planned environmental cleanup activities at installations.
- 2. Potential for inflation.
- 3. Lack of adequate funding in the appropriate fiscal years.

These risks can be mitigated by: (1) selecting sufficiently characterized sites; (2) performing a careful analysis of all possible remedies; and (3) conducting question and answer sessions with contractors during their proposal development period to minimize uncertainty and resolve issues.

(ii) Technical Risks:

- 1. For certain sites, the contractor may not be able to accomplish the performance objectives stated in the contract during the performance period since it is possible that a significant amount of previously unknown contamination will be discovered during the course of the cleanup. Though this scenario may not result in additional costs for the Army if environmental insurance has been secured, it may disrupt the schedule of planned cleanup activities at an installation.
- 2. The requirements may be changed based on changes in laws or regulations and customer direction.

These risks can be mitigated to some extent by: (1) selecting only sufficiently characterized sites; (2) using the PBC solicitation as a screening process to secure a pool of contractors with the ability, both financially and technically, to handle unforeseen contamination; [and (3) requiring contractors to purchase insurance from only Top-Rated Insurance Firms that can quickly disburse funds if necessary. For the purposes of this Acquisition Plan, Top-Rated Insurance Firms will be defined as underwriter providers that are rated A.M. Best's A-, Financial Size Category IX, or better.]

(iii) Schedule Risks:

- 1. PBC schedule and performance may be affected if the installation is included in a future BRAC round. Because most BRAC cleanups need to consider the future reuse of the property following the transfer of the property to another entity, additional environmental cleanup may be required to allow for anticipated future land use. This approach is different from the approach taken at some active installations since cleanup efforts are assessed based upon current and future operational uses and purposes. If a contractor has been awarded a PBC for work on a particular active installation, and the installation is closed in an upcoming BRAC round, the contract may have to be modified or cancelled since cleanup objectives may change to consider future reuse following transfer. In this situation, the Army may have to fund an additional contractor mobilization and demobilization effort to secure a separate contract for additional cleanup due to property transfer.
- 2. Congress or higher headquarters could reprogram funding.

With respect to the execution of the contract in an effort to maximize profit, the contractors will have incentive to use the most cost-effective technology in order to reach final contract milestones in an expedited manner. While the Government (Army) will relinquish some control of the project since they have placed more contract risk on the contractor, the Government (Army) will remain responsible for making or approving all key project decisions involving imminent safety concerns and the selection or implementation of environmental remedies or response actions.

(8) ACQUISITION STREAMLINING:

Not Applicable (This procurement is not a Major Systems Acquisition.)

PART B - PLAN OF ACTION

[The following section, (1) SOURCES, will be specific to the Installation. This section will change depending on the contract tool used, e.g., full and open competition, ACSIM ID/IQ, other]

(1) SOURCES:

Market Research was conducted using a Sources Sought announcement and historical data. Historical data from previous orders for like or similar services indicates enough sources were present to obtain competition. Based on the above, the contracting officer has determined reasonable competition can be obtained through [insert contract, e.g., ID/IQ, full and open] sources. Potential offerors have inquired with respect to competing for the [Installation] remediation contracts.

This requirement was reviewed for bundling and is not applicable to this acquisition.

It is anticipated that this requirement will be satisfied by placing an order against an [ID/IQ contract or full and open competition] and IAW FAR 8.404 (a)(1), no further consideration of small business programs is required.

(2) COMPETITION:

(i) Procurement Announcements:

The RFQ will be posted to the [Contracting Agency] web site.

(ii) Request for Quotation (RFQ):

The RFQ for the subject requirement will be conducted on a competitive basis. After reviewing bid proposals, the [Contracting Agency] will make one contract award. The amount of industry interest will negate the need for seeking, promoting, or sustaining additional competition. Significant interest is anticipated from the environmental remediation contractor community.

(3) SOURCE SELECTION PROCEDURES:

The RFQ will be competitively bid among [ID/IQ sources or full and open competition]. A Technical Evaluation Board will evaluate the quotes based on factors and sub factors contained in the RFQ. The board will evaluate the quotes based on the following factors: technical, past performance/past experience and cost. The Contracting Officer will consider the recommendation of the board and will award to the lowest price, technically acceptable offeror.

(4) ACQUISITION CONSIDERATIONS:

Award will be based on the use of a Technical Acceptable/Low Cost approach. A [contract type] contract is anticipated.

(5) BUDGETING AND FUNDING:

(i) Budgeting:

Initial estimate for this site environmental cleanup is based on figures contained in the Army's Restoration Cost-to-Complete System (RCTCS). A revised IGE is being developed and will only be used to evaluate quotes submitted by offerors.

(ii) Funding:

The Government (Army) will fund the entire PBC with Environmental Restoration Army dollars. [May need to revise this if/when funding from other sources are used to address other sites, e.g., OMA, BRAC, etc.]

(6) PRODUCT OR SERVICE DESCRIPTION:

The contract will be performance-based and may include, but is not limited to site characterization and investigation, sampling and analysis, preliminary assessments, feasibility studies, remedial investigations, remedial design, remedial implementation/construction, removal actions, and operations and monitoring.

(7) PRIORITIES, ALLOCATIONS, AND ALLOTMENTS:

Not Applicable

(8) CONTRACTOR VERSUS GOVERNMENT PERFORMANCE:

Not Applicable

(9) INHERENTLY GOVERNMENTAL FUNCTIONS:

While the Government (Army) will allow the contractor to be contractually responsible for most of the activities required or necessary to perform environmental remediation services, the Government (Army) will remain responsible for exercising its authority to make or approve all key project decisions involving imminent safety concerns and the selection or implementation of environmental remedies or response actions. In addition, because of the inherently governmental nature of selection and implementation of remedies and response actions, the Government (Army) will provide adequate program management oversight to ensure proper support for government decision makers.

(10) MANAGEMENT INFORMATION REQUIREMENTS:

The Government (Army) will require contract reporting which will provide accurate and timely information presenting a clear understanding of cost, schedule, and performance. No contract reporting criteria will be construed as requiring the use of any single system, or specific method of management control of performance evaluation. The Government (Army) will not require the contractor's internal systems to be changed, provided they satisfy the criteria for contract reporting. The Government (Army) will provide the criteria for reporting requirements in terms of technical, program management, quality, and cost effectiveness in the solicitation to permit a close interface with offerors' existing accounting and reporting systems. The Government (Army) will evaluate the contractor's performance against an agreed upon milestone schedule to authorize the payment. The contractors in the Project Management Plan and Milestone Summary Reports will address specific information requirements.

(11) MAKE OR BUY:

Not Applicable (Service Contract)

(12) TEST AND EVALUATION:

Not Applicable (Service Contract)

(13) LOGISTICS CONSIDERATIONS:

(i) Government:

Specific logistical support to be provided is specified in the RFQ.

(ii) Quality Control Requirements:

The contractor shall be required to establish and maintain a Quality Control Program that is acceptable to the Government (Army). As a minimum, the program shall have methods for identifying and correcting deficiencies and for assuring that all technical data (i.e., sampling results) are accurate. The program

also shall contain methods of documenting and enforcing quality control operation of both prime and subcontractor work.

(iii) Data:

As defined and addressed in FAR Part 27, data requirements may be required under the resultant contract. The contractor shall provide reports and input data to management systems by content and frequency as specified in the contract. The contractor shall be required to maintain files and report/provide appropriate data to Army database systems to document information contained in all reports and functions required under the contract.

(14) GOVERNMENT-FURNISHED PROPERTY:

Any property furnished to the contractor by the Government will be specified in the contract

(15) GOVERNMENT-FURNISHED INFORMATION:

The Government (Army) will make available records, reports, data, analyses, and information, in their current format (i.e., hardcopy, electronic, tape, disks, CDs, etc.), to facilitate development of a complete and accurate assessment of current, former, and historical activities and operations of contract sites. Specific data, records, or information to be provided by the Government (Army) will be provided as necessary.

(16) ENVIRONMENTAL AND ENERGY CONSERVATION OBJECTIVES:

The contractor shall comply with all applicable federal, state, and local energy conservation and environmental laws, regulations, and permit requirements.

(17) SECURITY CONSIDERATIONS:

Not Applicable – It is anticipated that the contract awardee will only require site access to execute work activities. Work activities and records are anticipated to be unclassified. Access to secure or classified areas will be appropriately coordinated with the installation security office.

(18) CONTRACT ADMINISTRATION:

The USAEC will appoint a Technical Representative to perform quality assurance over the life of the contract. USAEC will inspect and accept the services to determine the contractor's adherence to performance requirements.

(19) OTHER CONSIDERATIONS:

None.

(20) MILESTONES FOR THE ACQUISITION CYCLE:

Step	Suspense
Performance Work Statement Received at [Contracting Agency]	[Date]

Acquisition Plan Approval	[Date]
Completion of Acquisition Package	[Date]
Issuance of RFQ	[Date]
Contractor Proposals Due	[Date]
Begin Evaluation of Proposals	[Date]
Award to Successful Offeror	[Date]

(21) IDENTIFICATION OF PARTICIPANTS:

[Name], [Position], [Contracting Agency] [Phone]

[Name], Restoration Manager, USAEC [Phone]

(22) COORDINATION:

This plan has been reviewed and concurred upon by USAEC and [Contracting Agency].

APPROVED:

[Name]
[Position]
[Contracting Agency]

Attachment 6.1: Generic Quality Assurance and Surveillance Plan USAEC Performance-Based Contracting Guidebook [INSTALLATION] [DATES]

1.0 Overview

This performance-based Quality Assurance Surveillance Plan (QASP) sets forth the procedures and guidance that the Contract Officer Representative (COR) will use in evaluating the technical performance of the Contractor in accordance with the terms and conditions of the performance work statement (PWS). The QASP objective is to define Government procedures to be used to verify that appropriate performance and quality assurance methods are used in the management of this performance-based contract. The purpose of the QASP is to assure that performance of specific activities and completion of milestones are accomplished in accordance with all requirements set forth in the PWS.

This QASP describes the mechanism for documenting noteworthy accomplishments or discrepancies for work performed by the Contractor. Information generated from COR's surveillance activities will directly feed into performance discussions with the Contractor. The intent is to ensure that the Contractor performs in accordance with performance metrics set forth in the contract documents, the Army receives the quality of services called for in the contract, the Army only pays for the acceptable level of services received.

The QASP details how and when the COR will monitor, evaluate, and document Contractor performance on the PWS. The QASP is intended to accomplish the following:

- 1. Define the role and responsibilities of participating Army officials.
- 2. Define the key milestones/deliverables that will be assessed.
- Define acceptable, superior, and unacceptable performance standards for key milestones/deliverables.
- 4. Describe the surveillance methodology that will be employed by the Army in assessing the Contractor's performance.
- 5. Describe the surveillance documentation process and provide copies of the form that the Army will use in evaluating the Contractor's performance.
- 6. Outline payment and corrective action procedures.

This QASP will be revised and finalized by the COR and Contractor upon completion of the Project Management Plan (PMP).

2.0 Roles and Responsibilities of Army Officials

The Contracting Officer's Representative (COR) is responsible for technical administration of the project and assures proper Army surveillance of the Contractor's performance. The COR is responsible for monitoring, assessing, recording, and reporting on the technical performance of the Contractor on a day-to-day basis.

The Contracting Officer (KO) has overall responsibility for overseeing the Contractor's performance. The KO is responsible for the day-to-day monitoring of the Contractor's performance in the areas of contract compliance, and contract administration; reviewing the COR's assessment of the Contractor's performance; and resolving all differences between the COR's assessment and the Contractor's assessment of performance. It is the KO that assures the Contractor receives impartial, fair, and equitable treatment under the contract. The KO is ultimately responsible for the final determination of the adequacy of the Contractor's performance.

Attachment 6.1: Generic Quality Assurance and Surveillance Plan USAEC Performance-Based Contracting Guidebook [INSTALLATION] [DATES]

The COR and KO may call upon the technical expertise of other Army officials and subject matter experts (SME) as required. These Army officials/SMEs may be called upon to review technical documents and products generated by the Contractor. Contracting Agency representatives will also conduct review of contract documentation such as invoices, monthly status reports, and work plans.

3.0 Key Milestones/Deliverables to be Assessed

At a minimum, the following milestones and associated deliverables will be evaluated in accordance with this QASP (Based on milestones/deliverables in the PWS):

- Completion of the final Project Management Plan (PMP)
- Achievement of performance objective at each site specified in the PWS
- Completion of annual monitoring report(s)
- Completion of the final exit or ramp-down strategy for LTM/LTO
- Completion of final remedy review(s)
- Correction of deficiencies noted in the remedy review(s)
- Approved interim milestones identified in the final PMP

Additionally, the Army will evaluate performance on the key quality control activities and events specified by the Contractor through their Quality Assurance (QA) strategy (see PWS Section 3.3: Quality Management).

4.0 Performance Standards for Key Milestones/Deliverables

Since cost is fixed in the PBCs utilized by the Army, the Contractor's performance will be evaluated by assessing the key milestones/deliverables described above according to two standards: quality and timeliness. For each of these performance standards, the COR will assign one of three ratings of the Contractor's performance: superior, acceptable, or unacceptable (as shown in Table 1).

Table 1 Performance Standards

Performance Standard	Superior Performance	Acceptable Performance	Unacceptable Performance
Quality	Contractor exceeds the requirements in the PWS for the milestone/ deliverable. Deliverables /milestones are approved after one round of comments from Army and Regulators and no revisions are required.	Contractor meets the requirements in the PWS for the milestone/ deliverable. Deliverables /milestones are approved with two rounds of comments received from Army and Regulators and no further revisions are required.	Contractor does not meet the requirements in the PWS for the milestone/ deliverable. Deliverables/milestones require more than two rounds of Army and Regulators comments before being approved.
Timeliness	Contractor provides acceptable milestone/deliverable ahead of the schedule outlined in the PMP.	Contractor provides milestone/deliverable according to the schedule outlined in the PMP.	Contractor provides milestone/deliverable behind the schedule outlined in the PMP

Attachment 6.1: Generic Quality Assurance and Surveillance Plan USAEC Performance-Based Contracting Guidebook [INSTALLATION] [DATES]

If a milestone/deliverable is rated as being of unacceptable quality at the time that the PMP deadline for the milestone/deliverable expires, the milestone/deliverable will automatically receive an unacceptable rating for timeliness. At no point will a milestone/deliverable receive an acceptable or superior rating for timeliness if it is rated as being of unacceptable quality. Overall acceptable performance on a milestone/deliverable requires ratings of acceptable or superior for both the quality and timeliness standards.

5.0 Surveillance Methodology

The surveillance methods listed below will be used in the administration of this QASP.

100% Inspection

At the completion of all key milestones and deliverables, performance will be evaluated through 100% inspection (e.g., document review). The COR will document performance for each completed milestone/deliverable prior to payment, as described in Section 6.0.

Periodic Progress Inspection

At the COR's discretion, periodic inspections may be conducted to evaluate progress toward key milestones and deliverables. The COR may complete a periodic progress inspection if s/he believes that deficiencies exist that must be addressed prior to milestone/deliverable completion. While corrective action or re-performance will be required if necessary, the Contractor will not be financially penalized for unacceptable performance recorded in periodic progress reports, provided that final performance evaluation of the milestone/deliverable is deemed acceptable.

Customer Feedback

Additional feedback will be obtained through random customer complaints. To be considered valid, customer complaints must set forth clearly and in writing the detailed nature of the complaint, must be signed, and must be forwarded to the KO. The KO will maintain a summary log of all formally received customer complaints as well as a copy of each complaint in a documentation file.

6.0 Surveillance Documentation

The COR will use a performance evaluation form to record evaluation of the Contractor's performance for each milestone and deliverable in accordance with the methodology described in Sections 4.0 and 5.0. The COR must substantiate, through narratives in the form, all superior and unacceptable ratings. Performance at the acceptable level is expected from the Contractor. At a minimum, the evaluation form will indicate actual and scheduled delivery times and number of reviews required to achieve the final product.

The COR will forward copies of all completed performance evaluation forms to the KO and Contractor within one week of performing the inspection. When a milestone/deliverable receives an overall unacceptable rating, the Contractor will explain, within 15 days, in writing to COR why performance was unacceptable, how performance will be returned to acceptable levels, and how recurrence of the problem will be prevented in the future.

Attachment 6.1: Generic Quality Assurance and Surveillance Plan USAEC Performance-Based Contracting Guidebook [INSTALLATION] [DATES]

The KO will review each performance evaluation form prepared by the COR. When appropriate, the KO may investigate further to determine if all the facts and circumstances surrounding the event were considered in the COR opinions outlined on the form. The KO will immediately discuss any unacceptable rating with the Contractor to assure that corrective action is promptly initiated.

At the end of every year, the COR will prepare a written report for the KO summarizing the overall results of his/her surveillance of the Contractor's performance during the previous 12 months. This report will become part of the formal QA documentation.

The COR will maintain a complete QA file. This file will contain copies of all performance evaluation forms and any other related documentation. The COR will forward these records to the KO at termination or completion of the contract.

7.0 Payment and Corrective Action

Full payment for a milestone/deliverable will be provided upon verification of overall acceptable performance, as rated on quality and timeliness. This verification will be recorded in a performance evaluation form submitted to the KO specifying overall Contractor performance as either acceptable or superior for the milestone/deliverable.

If a milestone/deliverable receives an unacceptable rating for the quality performance standard, re-performance is required until the milestone/deliverable receives an acceptable rating. This reperformance is required regardless of cost or schedule constraints that may result from the unacceptable performance, unless the KO has opted to terminate the contract.

Table 2 summarizes the minimum key elements planned for the QASP. The final QASP will be developed with the COR and the contractor and will be based on the final PMP.

Additional Government surveillance activities may include, but are not limited to, the following [List is Installation/PWS specific]:

- 1) Work plan review and approval
- 2) Oversight of drilling, field sampling activities
- 3) Oversight of all waste management functions/responsibilities
- 4) Review of all waste management documentation
- 5) Separate/split laboratory QA samples
- 6) Review and approval of all access agreements associated with off-site areas
- 7) Review and approval of meeting minutes from RAB/BCT meetings
- 8) Review and approval of all deliverables to regulatory agencies
- 9) Review and approval of FS options to be considered
- 10) Review of quality control documentation
- 11) Review of project safety record
- 12) Adherence to the approved work plan

Attachment 6.1: Generic Quality Assurance and Surveillance Plan USAEC Performance-Based Contracting Guidebook [INSTALLATION] [DATES]

Table 2 Performance Objectives, Acceptance Criteria, and Monitoring Methods

Performance Objectives (from Table 1 in PWS)	Performance Standard (Table 1 in PWS)	Acceptable Quality Levels (Identified in QASP)	Monitoring Method
	1. Army approval	Acceptable or superior	100% inspection of
	Regulator approval or concurrence	performance, as defined in the QASP	milestones / deliverables associated with
	3. Schedule as identified in the PWS and agreed upon in the final PMP		objective

Attachment 6.1: Generic Quality Assurance and Surveillance Plan USAEC Performance-Based Contracting Guidebook [INSTALLATION] [DATES]

QUALITY ASSURANCE MONITORING FORM

Date:
Work Task (Milestone/Activity):
Survey Period:
Method of Surveillance: COR Review
Evaluation of Contractor's Performance:
Corrective Action Required: Yes No
Narrative Discussion of Contractor's Performance During Survey Period:

Attachment 6.1: Generic Quality Assurance and Surveillance Plan USAEC Performance-Based Contracting Guidebook [INSTALLATION] [DATES]

CORRECTIVE ACTION FORM FOR QASP

1)	Work Task (Milestone/Activity):
2)	Survey Period:
3)	Description of the Failure/Deficiency that Precipitated the Corrective Action:
4)	Description of the Criterion that the Failure/Deficiency was Evaluated Against:
	Personnel Involved in the Identification of the Failure/Deficiency, Determination Appropriate Corrective Action, Approval of the Corrective Action, and nentation of the Corrective Action: :
6)	Description of the Corrective Action that was Required:
7)	Date/Time of Implementation of the Corrective Action:
8) For Re	Follow Up Information to Prevent Recurrence of Failure/ Deficiency (i.e., Need evision of Procedures or Specifications):
9)	Personnel Responsible for Follow-Up Work:
10)	Planned Date for Follow Up Surveillance:
11)	Other Notes:

Introduction

An Independent Government Estimate (IGE) is an essential part of a Performance-Based Contracting (PBC) effort since it provides an estimate (for "Army Eyes Only") of the funds needed to complete the project as described in the Performance Work Statement (PWS)¹ and a basis for evaluating and/or comparing the cost portion of bids submitted by offerors. Specifically, an IGE is the Army's estimate of the cost of labor, travel, supplies, materials, and all other associated resources that are required to complete a project using a given remediation approach or set of approaches. The process of developing an IGE also serves as an independent check of the PWS (i.e., clarity of text, scope, etc.) as well as the level of uncertainty at sites included in the PWS. Finally, the IGE may be used as one tool to evaluate the cost reasonableness of the bids received and whether or not proceeding with award is in the Army's best interest (i.e., develop the Army's "Walk-Away Point").

The purposes of this guide are the following:

- 1) Describe the overall process used to develop PBC IGEs for the U.S. Army Environmental Center (USAEC);
- 2) Highlight observations from previous IGE development to improve the IGE process and accuracy of estimates going forward; and,
- 3) Describe the resources, tools, and typical timeframes that are necessary to complete PBC IGEs.

This guide does not describe in detail how to build an IGE from "scratch" since it is assumed that only personnel with prior cost estimating experience will be developing PBC IGEs.

Organization

This guide is organized in sections that correspond to the major IGE preparation steps. Each section describes the objective of the major step in general, and then lists the detailed tasks required to accomplish that step. The major IGE development sections/steps are:

- 1. Preparation, Site Visit, and PWS Scoping Coordination
- 2. Collect Background Information and Assess Remedy Strategies
- 3. Develop Remedy Strategies
- 4. Prepare Draft IGE
- 5. Prepare Monte Carlo Analysis
- 6. Prepare Draft IGE Narratives
- 7. Internal Review of Draft IGE
- 8. External Review of Draft IGE
- Finalize IGE and Assist in Development of "Walk-Away Point" and Contingency Funding Strategy

Key observations (from previous IGE development efforts) to be considered during IGE development are contained in text boxes found in the appropriate section/step. Finally, the last section presents the typical resources necessary to complete an IGE and a "Typical Schedule" that provides the timeframes associated with each of the major steps identified above.

¹ A PWS is similar to a Statements of Work (SOW) but a much greater emphasis is placed on specific project objectives, instead of on how to accomplish particular objectives.

STEP 1. PREPARATION, SITE VISIT AND PWS SCOPING COORDINATION

As part of the IGE development, the IGE developer should make a site visit to tour the site, meet site personnel, review background information and discuss overall strategy for completion of the IGE and meet regulatory agency representatives if they are available. This site visit can be taken as part of the initial PBC scoping visit or during the bidder site tour. The decision on when the IGE developer should visit the site is based on site-specific circumstances.

Actions

- Obtain the latest Installation Action Plan (IAP) and Cost-To-Complete (CTC) data and review prior to site visit.
- Through discussions with the PBC Extended Team, gain an understanding of site conditions, current uncertainties, site history, CTC assumptions, regulatory climate (i.e., likelihood of regulatory acceptance), and budgetary constraints.
- Coordinate/discuss likely remedy strategies and scope of the PWS and obtain input on overall project schedule.
- If not already in hand, identify key documents (electronically) to be used during IGE development. If the installation cannot provide copies, the PBC Team (USAEC) will provide assistance. These will be the same documents that are provided to the bidders.

Timeframe: The site visit should require no more than one or two days.

STEP 2. COLLECT BACKGROUND INFORMATION AND ASSESS REMEDY STRATEGIES

Obtain relevant background information and review, along with the Draft PWS if available, in order to gain a thorough understanding of the site and to identify any potential data gaps that may affect the IGE. Various sources of information should be consulted along with direct communication with the PBC Team. The review of background information should result in a preliminary assessment of remedy strategies. The remedial strategies should be developed as if the IGE was going to be a competitive bid for the work. Consideration should be given to providing the most cost effective and sound technical approach for the remedies.

Actions

 Through coordination with the PBC Team, obtain the latest and most relevant reports and data to include, but not limited to: Preliminary Assessment/Site Investigation (PA/SI) reports, Remedial Investigation/Feasibility Study (RI/FS) reports, Records of Decisions (RODs), Remedial Action Reports (or corresponding RCRA reports), Federal Facility Agreements (FFAs), Two Party Agreements, Remedial Design (RD), Operation and Maintenance Reports. Emphasis should be on obtaining the most relevant reports and data available.

CTC data should be used as a starting point for the IGE, but should not form the basis for an IGE since CTCs are typically prepared for planning purposes and does not always emphasize aggressive site closure strategies. Also, CTC data typically does not always contain the level of backup documentation necessary to support an IGE. Unless CTC data are clearly presented and contain all backup assumptions, CTC data may not be that helpful. The final IGE will need to include a comparison to the CTC.

- The assessment of likely remedial action strategies is a critical step in this phase and needs to be coordinated closely with the PBC team. If it is not possible to define a reasonable "most likely remedy" (due to site conditions, ROD status and/or other regulatory issues) a range of potential remedies should be considered and the likely range should be reflected in the IGE. The range of potential remedies can be evaluated in a Monte Carlo Uncertainty Analysis and can provide for more representative cost range of potential and reasonable costs. This range will help when developing the walk away strategy, as well as in determining cost realism of the proposals received.
- Review the Draft PWS if using a draft, determine the likelihood that USAEC is satisfied that major scope items are agreed on. Changes to the PWS may occur, and will lead to future changes in IGE resulting in potential delays.
- If still necessary, after receiving input from PBC Team, obtain relevant regulations since this will provide the framework for future actions and will impact overall costs.
- If, during review of information, large uncertainties are identified that may significantly change offerror bids, coordinate with the PBC Team and determine if a targeted data collection effort (i.e., quick field effort) can resolve uncertainty in a timely fashion so as not to delay procurement.
- If necessary, identify and contact other technical specialists to address a particular media (i.e., groundwater specialists) to support IGE development and assign tasks.
- Identify PBC Team members performing the external review, and develop internal IGE development schedule (i.e., Draft completion dates, review cycles) and distribute to the PBC Team.

Timeframe: Most of the above actions will occur during the time the PWS is still being developed and site documents are being compiled for distribution to offerors. The actions above should begin at the beginning of the IGE efforts and should take between 2 and 4 weeks depending on the complexity of the site.

STEP 3. DEVELOP REMEDY STRATEGIES

After collecting and reviewing background information, begin to develop site-specific or site wide remedial action strategies and consider any signed or Draft RODs, overall environmental conditions at site, available technologies, regulatory constraints, and cost considerations. Share these strategies with the PBC team for refinement. The remedy strategies and overall approaches must be technologically feasible, acceptable to regulatory agencies, and have a reasonable chance of being successful.

Actions

- With input as needed from the PBC scoping team, other technical specialists and technology vendors develop a strategy paper, that: 1) outlines preliminary remediation strategies, by site; 2) describes key assumptions that will be used to form basis for the IGE; and 3) identifies uncertainties including any remaining data gaps (i.e., extent of contamination, total volumes/quantity of media to be addressed, duration of remediation project and items excluded from scope) that may affect the accuracy level of the IGE.
- Distribute strategy document to PBC Team, hold a conference call, present the strategy, and modify strategy as necessary paying particular attention to feedback from site personnel.

Effective communication between PBC Team members is critical during this step to ensure that all are in agreement with major assumptions and/or the need to perform additional uncertainty reduction efforts. At one site, the PBC Team identified a significant uncertainty associated with the level of soil cover currently found on some large landfills. A short-term effort to assess the soil covers was put in place, and as result the IGE developer was able to more accurately estimate the volumes of soil that would be required. At other sites where the ROD status was either incomplete and/or needed revision, the remedies used by bidders in some cases turned out to be significantly different than those used to develop the IGE. The PBC team needs agreement on the major remedy elements to be used in the IGE. If the remedy selection uncertainty is too large, the IGE developer should consider a range of potential remedial actions.

- Through continuing dialog with the PBC Team, attempt to resolve identified data gaps or identify uncertainty reduction steps as described in Step 2. If data gaps cannot be filled, make best professional/engineering assumptions and document the assumptions.
- Finalize remedial action strategy document and distribute to the PBC Team. If necessary, as described above, the remedial action strategy should include a range of expected options.

Timeframe: Development of remedial action strategies will overlap somewhat with Step 2, but the above actions should be completed within five weeks of starting the IGE.

STEP 4. PREPARE DRAFT IGE

Once the remedial action strategies have been agreed upon, begin development of the Draft IGE, dividing the IGE into manageable or logical components or steps such as Operable Units and investigation phases (i.e., RI, FS, etc.) and/or specific PWS Contract Line Item Numbers (CLINs). The separate cost components can then be assembled to form the total IGE.

Actions

 Develop the Work Breakdown Structure (WBS) of the IGE to match the PWS CLINs or bid items.

Choose overall IGE development tools, references and approach: RS Means or other
unit rate cost books; Remedial Action Cost Engineering and Requirements (RACER)
software; local vendor quotes; EPA or state technology databases; or actual similar job
costs. At this point, need to also determine which components/sites should have
multiple remedies prepared to better understand the range of possible bids that we may
see.

RACER can be used for preparing IGEs, but IGE developers should consider the following when choosing this tool: 1) Default RACER technology modules tend to include many items that may not be applicable and it may be time consuming to delete and/or modify cost elements; 2) Separate mobilization and oversight costs may appear in every technology module thereby unnecessarily inflating costs; 3) Preparation of comprehensive IGE hardcopies may be cumbersome due to the numerous reports/printouts that must be individually printed; and, 4) To obtain more accurate estimates, local vendor quotes for major cost items should be used instead of default unit rates.

- Setup software or templates (e.g., Excel worksheets used from prior IGEs) to be used to present the IGE.
- Provide direction to technical specialists on IGE assumptions for sites and initiate estimating tasks.
- Administrative and professional management (PM) hours should be based on subtasks described in PWS, specific requirements of the FFA if applicable (or other agreements with regulators), and complexity of the job lead IGE developer should make a determination, based on complexity of the job, if a straight percentage (e.g., 10%) of the total costs for remedial actions can be used to estimate PM hours or if specific cost buildups are necessary.

Local vendor quotes should be used for significant cost items whenever possible since they are more representative of true costs. However, vendor quotes can be time consuming and difficult to obtain since vendors prefer to address real bid opportunities as opposed to providing cost information to estimators. One way to overcome this difficulty is to direct them to the Contracting Officer for the project so they can obtain a list of possible bidders. Some items that are relatively easy to obtain actual pricing are analytical services and T & D for waste disposal and these can have a significant impact on overall costs.

During the IGE development, vender quotes are not necessary for duplication or other minor costs that do not have a significant impact on the bottom line.

 Assess the level of uncertainty for each Operable Unit or Solid Waste Management Unit (e.g., unknown volumes of soil, unknown volumes of hazardous waste generated, type of technology to be utilized) and apply a specific contingency. Contingency factors range from 5% for straightforward remedies (e.g., small scale dig and haul project with a signed ROD) to 20% (or more) for more complex projects (e.g., uncharacterized volatile organic (VOC) plume at the RI stage). Keep in mind that since most PBC projects are fixed price, contingency factors will be higher than under a cost-plus scenario.

- Develop unit prices and lump sum estimates for various remedial tasks (e.g., investigations, reports, remedial actions).
- Enter all cost elements into the cost estimating software or templates along with a comprehensive description of key assumptions and other reader notes, and develop a Draft IGE. During this process continue to communicate with the PBC Team to refine assumptions and the overall approach as estimate is developed.

Do not include any cost information in the IGE that has the name of any contractors that may potentially be the prime offererors on any PBC project as this may complicate the award process.

- Determine potential cost of insurance premium based on the overall level of uncertainty and complexity of project and estimate a cost-cap insurance premium. Typically, the less there is known about a particular site the greater the insurance premium – this is particularly true with large groundwater plumes. Premiums usually run from 6% to 14% of the cost of the entire project.
- For costs that will be incurred in future years, the cost of those elements should be
 escalated to reflect the cost of the item in the year it is anticipated to be incurred. This
 can be accomplished using inflation factors from the Army budget site
 (www.asafm.army.mil/budget/di/di.asp).

Timeframe: 14 to 21 calendar days once the remedy strategies are agreed upon. The duration of the step could be shorter (14 days) or longer (21 days) depending on the size and complexity of the job, availability of vendor quotes, ability to separate out discrete cost elements, and the level of PBC team agreement on PWS (i.e., frequent scope changes will prolong IGE development).

In FY04, a smaller contract was bid with premiums in the 15% range, indicating there may be a floor to premium costs that drives the premium up as a percentage for small procurements.

STEP 5. DEVELOP MONTE CARLO UNCERTAINTY ANALYSIS

Monte Carlo Uncertainty Analysis (MCUA) is a quantitative simulation technique used in a variety of different decision analysis models. A common business application is focused on bounding the impacts of uncertain parameters on the key end-state variable (e.g., cost) used for a specific business decision. MCUA in support of IGEs is generally used in one of two ways. The main application is to evaluate the uncertainty of the total IGE costs based on the variability (uncertainty) of key inputs to the IGE cost model (e.g., volume of soil to be removed, costs for T &D, indirect rates, profit percentage, etc.). The second way MCUA will be used is to develop a cost model that considers multiple approaches (i.e., different remedial technologies) to address the same site. The MCUA simulation can be set up to select from the multiple approaches so

that it develops a range of costs that include the probability that any one of the approaches (technologies) would be used.

When applied to PBCs for environmental restoration/closure, the impacts of uncertainty on costs can be significant depending on the types of alternatives considered in the analysis. The MCUA is intended as a tool to bound the range of uncertainty in the cost estimate and assist the Army Environmental Center (USAEC) make decisions regarding costs of the PBCs, understand the variability in costs submitted by bidders, and make determinations on whether to award a contract when the proposed costs are significantly higher or lower than the IGE. In general the upper bound of likely costs of a PBC will be set at the 85th percentile.

Actions

Once the draft IGE has been prepared, an MCUA will be performed using a commercially available software package (Crystal Ball) that performs this type of analysis. The following are the general steps involved in running the MCUA:

- Identify the parameters that are uncertain and likely to significantly impact costs.
- Identify the likely range of uncertainty associated with each parameter and most likely value.
- Identify the anticipated type of distribution for each variable (normal, log normal, triangular, uniform, etc.).
- If necessary develop a model that incorporates the potential selection of multiple remedial approaches (technologies) for the same site.
- Run MC simulation and develop reports which include the probability distribution of the IGE
 (i.e., the anticipated range of the IGE and probability associated with that range) and a
 sensitivity analysis report (which shows the impact of the uncertainty for each variable on
 the overall IGE (defined as percent impact to the variance).
- Once the initial MCUA is run, the variables and ranges can be evaluated and adjusted as determined appropriate.

STEP 6. PREPARE DRAFT IGE NARRATIVE

Once the Draft IGE is nearly finalized, prepare the two narrative documents that will accompany the Draft IGE during the ensuing review cycles.

Actions

- Develop a two to three page cover letter, addressed only to the applicable USAEC representative(s), that includes the following elements:
 - PWS or Request for Quotation (RFQ) modification version that was used to develop the IGE:
 - Summary of costs (in table format); and
 - A brief comparison between IGE and the CTC, by Operable Unit (OU)/Solid Waste Management Unit (SWMU) total cost, highlighting likely reasons for the observed differences.
 - o Contact and IGE distribution logistics (i.e., number of copies being sent, etc.)
- Develop a document titled "General Discussion" that includes the following elements (use document from Step 3):
 - Methodology used to develop IGE;

- Overall remedial approach used in the IGE;
- Key assumptions and basis/reference for certain cost elements;
- Major uncertainties and potential impacts uncertainties have on IGE (this will be the presentation of the MCUA); and
- Rationale for insurance premium.
- The cover to the IGE will include a set of signature blocks that include the signature of the IGE preparer (prepared by) and the signature of the AEC RM (approved by).

Timeframe: 2 to 3 calendar days.

STEP 6. INTERNAL REVIEW OF DRAFT IGE

After the Draft internal IGE and narrative is prepared perform an internal review of the IGE and narrative documents.

Actions

The IGE team leader will identify a senior technical specialist and coordinate an independent review of the following: 1) appropriateness of technical approach; 2) accuracy of IGE and cost elements; and 3) overall presentation and format of IGE. Note: The internal review will occur more quickly if you provide the reviewer with sufficient background information prior to requesting a review. The reviewer should be given a week or two advanced notice so that adequate time is set aside for the review without jeopardizing the overall schedule.

 After the technical review is completed, incorporate comments, modify the IGE, and prepare hardcopies or electronic versions of the complete Draft IGE for external review.

Timeframe: 14 calendar days.

STEP 8. EXTERNAL REVIEW OF DRAFT IGE

Provide the updated (based on internal comments) Draft IGE to previously identified PBC Team members performing the external review of the IGE and after receiving comments modify IGE and finalize.

Actions

- Distribute Draft IGE to identified PBC Team members.
- Hold conference call with PBC Team members performing external review, present key assumptions, overall strategy, provide review completion deadlines and verify the number of IGE hardcopies that must be delivered. This should be coordinated by the AEC RM as needed.
- The AEC RM should contact the Contracting Office that will be handling the award and notify them of the schedule for delivery of the IGE.
- The AEC RM should coordinate the comments on the IGE and forward to the IGE preparer. Comments from reviewers will be incorporated and IGE and modified as necessary.

• If necessary, update Draft IGE with any new data or pricing information and if changes to the PWS have been made, adjust the IGE accordingly.

Timeframe: 10 to 12 calendar days, depending on the complexity of the project.

STEP 9. FINALIZE IGE AND ASSIST IN DEVELOPMENT OF "WALK-AWAY POINT" AND CONTINGENCY FUNDING STRATEGY

Finalize the IGE and assist in developing any summary information to support procurement actions ("walk away points", briefing sheets). .

Actions

- Produce the Final IGE, bind hardcopies with binder cover sheet, and distribute entire package (including electronic versions). Typical distribution will be 4 copies to USAEC, RM; 1 copy to IGE lead, and 1 copy for USAEC program manager.
- Upon receipt, the USAEC Restoration Manager (RM) will forward the Final IGE to Contracting Office – the Final IGE must be in the Contracting Officer's hand no later than one week before the deadline for submitting PBC proposals.
- Coordinate closely with the USAEC RM and discuss a "Walk-Away Point" and contents
 of the Executive Briefing Sheet. The "Walk-Away Point" identifies the range of bids
 (based on the IGE) the Army will consider during cost volume evaluation. In developing
 the "Walk-Away Point" consider the range of uncertainties found in the IGE. Examples
 include the ROD status; uncertainty in the range of selected remedial strategies (i.e., use
 of more permanent remedies that may reduce long term costs); and site characterization
 uncertainties (i.e., classification of wastes).

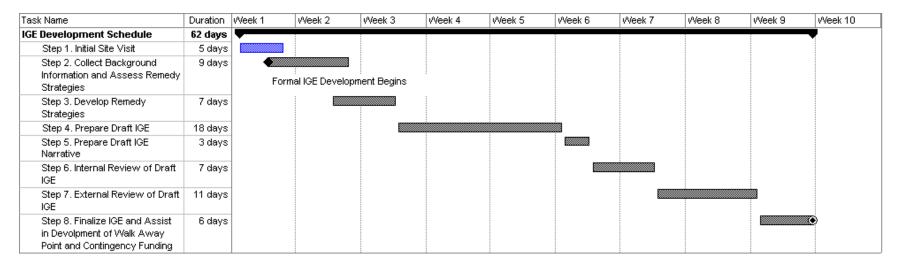
Timeframe: 6 calendar days.

RESOURCES AND TYPICAL IGE DEVELOPMENT SCHEDULE

It is estimated that developing an IGE should require approximately 250 professional hours. The level-of-effort will vary somewhat (+/- 60 hours) depending on the complexity of the project, duration of IGE review cycles, and site uncertainties. Figure 1 provides a typical two-month schedule for completing a PBC IGE referencing the same Steps that are described above. IGE development begins once the decision to proceed with a PBC is made. The typical IGE development process lasts approximately two months (60 to 65 calendar days), but the actual schedule for each IGE will vary based on the size and complexity of the project, amount of upfront work accomplished before the PWS is finalized, and ability/availability of reviewers to quickly review the Draft IGE. All efforts should be made to not extend pass 75 days when preparing an IGE.

Figure 1. Typical PBC IGE Development Schedule

(All Days Are Calendar Days)



- See PBC Implementation Paper to determine how schedule fits into overall PBC Award process.

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Attachment 8.1: Example Offeror's Site Visit Package USAEC Performance-Based Contracting Guidebook [INSTALLATION] Offeror's Site Visit [DATE]

Package Contents

- Agenda
- Performance Work Statement Requirements Summary
- Installation Map
- Site Descriptions

Revised: [DATE]

1

Attachment 8.1: Example Offeror's Site Visit Package USAEC Performance-Based Contracting Guidebook [INSTALLATION]

[INSTALLATION] Offeror's Site Visit [DATE]

Agenda

900-915	Welcome
915-1030	PBC Overview
1030-1045	Break
1045-1130	Overview by Regulators
1130-1230	Lunch
1230-1400	Site Tour
1400-1530	Questions and Answers
1530	Adjourn

Revised: [DATE]

Attachment 8.1: Example Offeror's Site Visit Package USAEC Performance-Based Contracting Guidebook [INSTALLATION] Offeror's Site Visit [DATE]

Performance Work Statement Requirements Summary

Performance Objective	Performance Standards

Revised: [DATE] 3

Attachment 8.1: Example Offeror's Site Visit Package USAEC Performance-Based Contracting Guidebook

[INSTALLATION]
Offeror's Site Visit
[DATE]

Installation Map

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Attachment 8.1: Example Offeror's Site Visit Package USAEC Performance-Based Contracting Guidebook [INSTALLATION] Offeror's Site Visit [DATE]

Site Descriptions

Site Photo

[SITE NUMBER]: [SITE NAME]

Site Description (from IAP)

Revised: [DATE] 5

Attachment 8.2: Template Invitation for Regulator Participation at the PBC On-Site Evaluation USAEC Performance-Based Contracting Guidebook

As part of the Army's on-going Performance-Based Contract (PBC) initiative, the US Army Environmental Center (USAEC) propose to conduct an on-site PBC candidate evaluation meeting at [INSTALLATION NAME, STATE] from [MEETING DAY(S), MONTH, YEAR]. The purpose of this meeting is to hold discussions with installation personnel, technical program leads (e.g., the US Army Corps of Engineers), and regulators to determine whether individual sites and/or all sites are candidates for implementation of a PBC. The specific objectives of the meeting are to:

- 1) Familiarize the installation personnel and regulators with the Army PBC initiative;
- 2) Discuss installation and site histories and the current remediation phase for open sites, identify AEDB-R sites (including Military Munitions Response Program MMRP sites) and Compliance Cleanup (AEDB-CC) sites with significant technical uncertainties, and discuss installation's strategy for managing those uncertainties (i.e., how well can we define the site boundaries);
- 3) Understand the current planned exit strategy for open sites;
- 4) Understand the regulatory and legal drivers, including the status of RCRA permits, Federal Facility Agreements, etc., for the Installation and/or specific sites;
- 5) Identify the availability of the most relevant documents for all open AEDB-R sites and AEDB-CC sites (e.g., project documents, schedules, permits, Consent Orders, Federal Facility Agreements). These documents should be made available to the bidders if a PBC is recommended:
- 6) Determine the current status of funding and contracting efforts, including current execution agency(ies) and incumbent contractor(s), and identify appropriate contract transition/break points; and
- 7) Identify the data and assumptions used to develop the current cost-to-complete (CTC).

The results of these discussions are captured in a site matrix and Candidate Evaluation Report. Open sites that are not deemed good candidates for a PBC (e.g., timing will not meet installation needs, remedial investigation not complete) are also noted in the site matrix. These sites should have a defined path forward and/or exit strategy to ensure their progress outside of a PBC.

Attached you will find a draft agenda for the PBC candidate evaluation meeting and examples of matrices used to collect site information.

Additional information about the PBC initiative is available at USAEC's web site (http://aec.army.mil/usaec/cleanup/pbc00.html). Your participation is very important to the Army's ability to successfully evaluate the sites at the installation. Should you have any questions regarding the Army's PBC initiative prior to the meeting, please feel free to contact the USAEC Restoration Manager, [RM NAME] at (410) 436-<a href="[EXTENSION]].

Attachment 8.2: Template Invitation for Regulator Participation at the PBC On-Site Evaluation **USAEC Performance-Based Contracting Guidebook**

[INSTALLATION NAME]

Meeting Agenda – Draft

Performance-Based Contract On-Site Evaluation

[X:XX to X:XX]	Introductions /Overview of Installation (to be provided by the Installation) Installation orientation Major Units Where site tour will go IRP and CC site locations Maps
[X:XX to X:XX]	Site Tour √ Windshield tour of IRP/MMRP sites
[X:XX to X:XX]	USAEC PBC Overview (RM and CALIBRE)
[X:XX to X:XX]	LUNCH
[X:XX to X:XX]	Discussions of Sites in PBC Matrix IRP/MMRP/CC (provided in advance) Current Status Key challenges Work completed to date Key uncertainties Funding status Execution Strategy Key Documents
[X:XX to X:XX]	Discussion of Path Forward √ Follow up questions (as required) √ Schedule √ Identification of outstanding issues
[X:XX]	Adjourn

NOTE: Portions of the following attachments may contain information protected from disclosure under the Procurement Integrity Act, 41 USC 423 and Freedom of Information Act, 5 USC §552 and are therefore exempt from disclosure under applicable law.

Attachment 10.1: Template GFPR & FFPR Technical Evaluation Board Checklist

Attachment 10.2: Template GFPR & FFPR Technical Evaluation Board Checklist

If you require a copy to perform in an official capacity, please contact PBC.Team@aec.apgea.army.mil