

ADEM's Request for Proposal for Technical Support

November 1, 2022

Several Department of Defense facilities such as Fort McClellan and Alabama Army Ammunition Plant (both Base Realignment and Closure [BRAC] sites), Camp Sibert (a formerly Used Defense Site [FUDS]), Redstone Arsenal, Fort Rucker, and Anniston Army Depot (RCRA permitted treatment, storage, and disposal [TSD] facilities) have been targeted for investigation and remediation in the State of Alabama. Environmental concerns at these sites include Munitions of Explosive Concern (MEC), Chemical Warfare Materiel (CWM), and Hazardous, Toxic, and Radiological Waste (HTRW).

The Alabama Department of Environmental Management (ADEM or the Department), acting as an overseeing regulatory agency of these sites and others in Alabama, intends to retain a contractor to provide expert review of submittals and general services related to MEC, CWM, and HTRW. The Department is seeking a qualified firm to provide such support and respectfully requests that if your firm would like to be considered, it submit a technical and cost proposal for ADEM's review.

Enclosed is the "Information Regarding Preparation and Submittal of Proposals". Please submit your proposal on or before 5:00 P.M. December 9, 2022. For any questions or concerns regarding this matter, please contact Mr. Daniel Arthur at 334-271-7786 or via email at daniel.arthur@adem.alabama.gov.

Daniel Arthur, Chief
Facilities Engineering Section
Governmental Hazardous Waste Branch
Land Division

**Information Regarding Preparation and
Submittal of Proposals
for**

**Technical Support to the Alabama Department of Environmental
Management (ADEM)**

**Contact Person: Daniel Arthur
Phone: (334) 271-7786
Fax: (334) 271-7786
E-mail: daniel.arthur@adem.alabama.gov**

November 2022

Information Regarding Preparation and Submittal of Proposals for Technical Support to the Alabama Department of Environmental Management (ADEM)

1. OBJECTIVE

The objective of this Request for Proposal (RFP) is for ADEM to secure the services of a contractor to assist the Governmental Hazardous Waste Branch of the Land Division with the review of technical and regulatory submittals addressing environmental restoration activities at Department of Defense (DoD) facilities. The scope of the restoration activities to be reviewed includes both conventional investigation and remediation activities, as well as the investigation and cleanup of unexploded ordnance (UXO) and other munitions-related items (generally referred to as munitions of explosive concern [MEC]), including ordnance and explosive scrap (OE scrap). Specifically, the UXO/MEC component of this RFP includes review of submittals and limited field oversight (e.g., quality assurance-based support) related to the identification and cleanup of MEC at Fort McClellan (Calhoun County), Fort Rucker (Dale County), Camp Sibert (Etowah and St. Clair Counties), Redstone Arsenal (Madison County), Anniston Army Depot (Calhoun County), and other possible MEC sites in Alabama. The scope also includes review of regulatory and technical matters related to various hazardous, toxic, and radiological waste (HTRW) sites at these and other DoD sites (including Maxwell Air Force Base and various National Guard and Formerly Used Defense Sites [FUDS]) in Alabama, with a primary focus on both human health and ecological risk.

The contract period is anticipated to begin on or around May 1, 2023 and will run for two (2) years following the date of execution. The Alabama Department of Environmental Management is providing an opportunity for firms to submit proposals for review and consideration at this time.

2. BACKGROUND INFORMATION FOR MEC SUPPORT TO ADEM, GENERAL MEC QUALIFICATIONS, AND GENERAL LIMITATIONS

2.1 Background Information

- MEC is a safety hazard to the Army, the public, and potentially to future landowners. It may constitute an imminent endangerment to health, life, or ecological habitat. MEC may be buried or may possibly be present on or near the ground surfaces.
- The scope for this RFP is meant to provide for an independent Contractor review of all MEC-related submittals and limited field oversight, as outlined herein and as contracted to ADEM.
- The MEC work is being or will be performed in a manner consistent with Section 104 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); with Sections 300.120(c) and 300.400(e) of the National Contingency Plan (NCP); with the Alabama Hazardous Wastes Management and Minimization Act (AHWMMA); with the Alabama Environmental Investigation and Remediation Guidance (AEIRG); and with the

Alabama Risk-Based Corrective Action Guidance (ARBCA). The applicable provisions of 29 CFR 1910.120 shall also apply.

- Applicable provisions of the following MEC-related directives, regulations, policies, guidelines and laws shall apply: Section 107 of the Federal Facilities Compliance Act of 1992 (including the Military Munitions Rule), Range Rule, Department of Defense Explosives Safety Board (DDESB) 6055.9, DoD Directive 4715.11, DoDD 4715.12, DoD 4145.26-M, DoD Advanced Geophysical Classification Accreditation Program (DAGCAP), Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP) - AGC for Munitions Response, DoD Quality Systems Requirements for AGC, and Hazard Classification. The selected Contractor should conduct its technical and regulatory reviews to ensure that DoD work is consistent with these MEC-related rules and guidelines.
- Applicable provisions of the MIL-Std 1916 shall also apply to all environmental restoration work, including MEC investigation and removal. The selected Contractor should conduct its technical and regulatory reviews to ensure that DoD work is consistent with this military standard.

2.2 Site Description & Relevant Information

2.2.1 Fort McClellan

- Fort McClellan is an inactive Army installation managed under the Base Realignment and Closure Act (BRAC). It is located northeast of the City of Anniston in Calhoun County, Alabama. To the west are the communities known as Weaver and Blue Mountain. To the North is the City of Jacksonville. The Choccolocco State Forest and the Talladega National Forest are located to the east of this former federal installation.
- Fort McClellan (Main Post) mainly lies within the Appalachian fold and thrust structural belt (Valley and Ridge Province). Southeastward-dipping thrust faults with associated minor folding are the predominant structural features. The extreme eastern portion of Fort McClellan lies within the Piedmont physiographic province. Topographic relief across the Main Post at Fort McClellan exceeds 1,300 feet. The lower elevations (700 feet above sea level [msl]) occur along Cane Creek near Baltzell Gate Road. The highest elevation (2,063 feet above msl) occurs on Choccolocco Mountain, which traverses the area in a north/south direction with steep easterly slopes grading abruptly into Choccolocco Valley.
- Approximately 10,000 acres of property were historically used as active military ranges (small arms ranges, artillery ranges, skeet ranges, known distant ranges, etc.). Some of the ranges overlap each other. The ranges were placed in all types of topographic settings throughout the Choccolocco range and basin located within the historical cantonment area. Open burn/open detonation (OB/OD) activities also historically occurred in certain areas of Fort McClellan.

- In 1995, the U.S. Department of Defense announced that Fort McClellan would close by October 1999. The U.S. Army identified approximately 18,520 acres at Fort McClellan that would no longer be needed for military use upon closure (18,929 total Main Post acres, less 409 acres to be maintained for Army reserve training).
- Much of this former installation has been transferred to the Local Reuse Authority – known as the McClellan Development Authority (MDA), formerly known as the Joint Powers Authority (JPA) – to other state and federal agencies, and to the public sector. The following is a summary of the present estimated land reuse plans for this former installation:
 - 7,683 acres of land are identified to be reused by federal agencies, with the majority of this land transferred to the U.S. Fish and Wildlife Service.
 - 291 acres within the Main Post are licensed to the Alabama Army National Guard for continuation of training operations.
 - Approximately 280 acres are to be used for Public Benefit Conveyance.
 - Approximately 1,326 acres of land are subject to a No-Cost Economic Development Conveyance.
 - Approximately 7,900 acres of land known as the cantonment, Alpha, and Bravo areas were transferred to the MDA.
 - Approximately 500 acres were transferred to the Alabama Department of Transportation (ALDOT).
- The Army has completed a Phase I Environmental Services Cooperative Agreement (ESCA) for the cleanup of 4,692 acres of the Alpha and Bravo areas of Fort McClellan by the MDA. A Phase II ESCA to address the cleanup of an additional 3,347 acres of the Bravo Area was signed on September 11, 2007.
- A Cleanup Agreement between MDA and ADEM and a Memorandum of Agreement (MOA) between the Army and ADEM are in effect, addressing the portion of Fort McClellan that has already been transferred to the MDA under Finding Of Suitability to Transfer (FOSTs) and Finding Of Suitability for Early Transfer (FOSETs). The original Cleanup Agreement and MOA were signed on September 30, 2003. Portions of the lands transferred to the MDA include areas contaminated with MEC. . MEC removal on the MDA property is complete. However, MDA retains the responsibility for removal and destruction of MEC that may be encountered in the future.
- In 2003, the U.S. Fish and Wildlife Service (USFWS) took possession of the Charlie Area, an 8,507-acre land area known to be contaminated with MEC. This area is now known as the Mountain Longleaf Pine National Wildlife

Refuge. The Army has retained responsibility to manage the MEC investigation and cleanup in the Charlie Area.

- The Army and MDA have each retained independent contractors for direct MEC services, including the investigation and removal of MEC at Fort McClellan. During subsequent MEC removal actions under the BRAC process, the Army and MDA contractors will destroy all UXO/OE encountered by on-site detonation.
- ALDOT has completed construction of a new highway known as the Eastern Bypass that traverses the Alpha, Bravo and Charlie MEC areas.

2.2.2 Camp Sibert

- Camp Sibert is a Formerly Used Defense Site (FUDS) covering approximately 37,098 acres located in both Etowah and St. Clair counties. It was used for basic military training and also as a chemical warfare materiel (CWM)/chemical weapons training area from 1942 to 1945.
- In the late 1940s, the Army transferred ownership of the site back to the local government. Since that time, the cities of Gadsden, Attalla, and Rainbow City have developed on and around former Camp Sibert property. The former cantonment area became a residential area in Gadsden and the former post airfield became the Gadsden Municipal Airport. At present, most of the former maneuver and training areas are reportedly being used by private and corporate land owners for farming and forestry.
- Significant CWM training activities occurred at the Former Camp Sibert. CWM-related MEC (including intact CWM-configured ordnance) were used and are known to be present on site. As a result, the U.S. Army Corps of Engineers (USACE) assigned a Risk Assessment Code (RAC) score of 1 (the highest level of risk score possible on a scale of 1 to 5).
- A preliminary investigation was conducted by the USACE in 2002. This investigation identified 13 sites with the potential to have significant amounts of CWM and associated MEC contamination. The U.S. Army Engineering and Support Center, Huntsville (USAESCH) concluded that six of the thirteen sites exhibit a higher probability of encountering CWM in soil and other media. The “higher likelihood” sites are as follows:
 1. **Site 2A** – chemical agent decontamination training area and possible burial site for contaminated material
 2. **Site 2B** – chemical land mine training area where chemical land mines were filled and detonated
 3. **Site 8** – impact area for the firing of toxic munitions, including chemically configured 4.2-inch mortar rounds
 4. **Site 9** – mini-mortar range, possibly including a small-scale depiction of a town used for mortar training
 5. **Site 13** – contaminated heavy equipment burial site

6. **Site 14** – dump area possibly used for the disposal of military munitions
- The seven “lower likelihood” sites are as follows:
 1. **Site 3** – former toxic gas yard and burial site
 2. **Site 4** – toxic gas yard
 3. **Site 6** – chemical filling area
 4. **Site 11** – possible munitions burial area
 5. **Site 12** – smoke generator and possible munitions burial area
 6. **Site 15** – possible munitions burial area
 7. **Site 16** – air operations filling area
 - Site 8 is presently a farm and private residence owned and operated by a private land owner. On August 15, 2002, a fused and armed chemically configured 4.2-inch mortar round was found at this site. The round was found near the ground surface (within a depth of six inches) in a cow pasture and in close proximity to a residence. The USACE mobilized an Explosive Destruction System (EDS) from the Army’s Aberdeen Proving Ground to Camp Sibert. The USACE used the EDS to safely destroy the subject 4.2-inch chemical mortar and to neutralize the phosgene chemical agent contained in the round. A removal action was conducted to address the MEC contamination from 2006 through 2009, intrusively investigating a total of 18,329 anomalies over a total of 312 acres, including 25 intact liquid filled mortars. The USACE is currently planning to convert a large portion of the site into wetlands as the Canoe Creek Mitigation Bank.
 - The Army has retained its own contractor to provide direct MEC services, including the investigation and removal of MEC at the Former Camp Sibert.
 - Since 1990, the USACE and its contractor have completed site characterizations, records searches, engineering evaluation/cost analysis studies, and removal actions at 32 sites and a number of training areas and topographic engineering features throughout the former Camp Sibert. The MEC investigations have covered over 190 properties, which encompass approximately 3,300 acres.
 - Remedial investigations and feasibility studies have been conducted at the seven conventional military munitions response sites (MRSs) and four suspected CWM MRSs.
 - A removal action for MEC has been conducted for Site 17, Site 18, Site 19 Area A, Range 28 Area A, and Topographical Engineering Feature – 36 (TEC-36).

2.2.3 Redstone Arsenal

- Redstone Arsenal (RSA) is an active U.S. Army facility located in Madison County, Alabama. RSA occupies approximately 38,300 acres. The Department of Interior owns approximately 4,100 acres of this property, and

the Tennessee Valley Authority owns 2,900 acres. Another 1,841 acres in the interior of RSA comprise the George C. Marshall Space Flight Center (MSFC) of the National Aeronautics and Space Administration (NASA). RSA is bounded on the north and east by the City of Huntsville, on the west by the City of Madison, on the west and south west by Wheeler National Wildlife Refuge, and on the south by the Tennessee River. Huntsville has a population of approximately 217,000; Madison County population is approximately 395,300. Approximately 500 military families reside in government quarters on RSA, and between 36,000 and 40,000 government employees and contractors work at the facility.

- The Installation Restoration Program (IRP) execution agency is the U. S. Army Corps of Engineers (Investigation Phase and Action Phase). The following agencies participate in the regulatory review of CERCLA and Resource Conservation & Recovery Act of 1976 (RCRA) activities at RSA: United States Environmental Protection Agency (USEPA) Region IV, USFWS in Decatur Alabama, and ADEM.
- Redstone Arsenal is home to over 60 different tenant organizations. The primary mission of the installation is the development, acquisition, testing, fielding, and sustainment of aviation and missile weapon systems. Most of the installation's tenants support the aviation and missile weapon system effort. However, Redstone is also home to such diverse activities as training for handling explosives and ordnance devices, Defense Intelligence Agency activities, and the production of iron carbonyl.
- Redstone Arsenal's primary contaminants of concern include chlorinated solvents, perchlorate, pesticides, UXO, CWM, metals and the affected media of concern include groundwater, soil, sediment, and surface water.
- Redstone Arsenal's Military Munitions Response Program (MMRP) primary contaminants of concern include conventional UXO and CWM.
- The regulatory milestones and issues relevant at RSA:
 - RSA has an Alabama Hazardous Wastes Management and Minimization Act (AHWMMA) permit for treatment, storage, and disposal (TSD), and is subject to RCRA Corrective Action. The permit was initially issued on April 25, 1986, which was last renewed on July 19, 2021, and has undergone 1 modification, the most recent occurred on August 12, 2022.
 - RSA was proposed for the National Priorities List (NPL) in accordance with Proposed Rule No. 15, Vol. 58, No. 119, on June 23, 1993.
 - Redstone Arsenal (U.S. Army/NASA) was named to the final NPL per the Federal Register, Vol. 59, No. 103, on May 31, 1994.
 - The Risk Managers Partnering Agreement was established in October 1997.

- Redstone operates Open Burn/Open Detonation (OB/OD) units in accordance with its AHWMMMA permit (i.e., conforms to RCRA Subpart X).
 - Redstone operates a hazardous waste temporary storage unit in accordance with its AHWMMMA permit. The storage is greater than 90 days.
 - RSA's AHWMMMA permit includes two explosive destruction system (EDS) units that will be used to neutralize recovered, chemically configured munitions or other items that contain chemical agent or industrial chemical fills.
- In September 1989, the USEPA conducted an Interim RCRA Facility Assessment (IRFA) at RSA and another at the co-located MSFC site. This study resulted in the identification of 110 sites at RSA and 77 sites at MSFC. Between 1989 and 1990, the U.S. Army re-evaluated the USEPA IRFA and identified additional sites on RSA, including property located on RSA that is owned by the Tennessee Valley Authority (TVA) and Wheeler Wildlife Refuge. A total of 286 sites were identified in this follow-on study. Since then several sites have been added to the list, for a current total of 459 sites.
 - Of the 459 sites, the Army has responsibility for 384 sites, including the five Olin Chemical Corporation DDT sites (RSA-101, 102, 103, 105, and 106), and MSFC is responsible for 75 sites. Since the 2010 permit renewal, all of the Redstone sites are being managed under RCRA/AHWMMMA.
 - The following is a brief synopsis of the status of RSA sites, according to the permit:
 - Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) requiring a RCRA Facility Investigation (RFI) – 60 Sites
 - SWMUs and AOCs requiring No Further Action (NFA) at this time – 146 Sites
 - SWMUs and AOCs requiring Interim Measures (IM) and/or Source Removal – 17 Sites
 - SWMUs and AOCs regulated by Parts I-III and VI of the current permit – 35 Sites
 - SWMUs and AOCs requiring a Corrective Measures Implementation (CMI) Plan – 108 Sites
 - SWMUs and AOCs requiring Corrective Measures – 38 Sites
 - On May 31, 1983, Olin signed a Consent Decree with the State of Alabama and the United States requiring that it investigate and remediate the five co-

located Olin Sites. The Consent Decree provided for a Review Panel responsible for technical overview of Olin's remedial action proposals. Remediation activities are ongoing and the Consent Order remains active at this time.

- The Army is following the RFI Schedule of Compliance (Alternate Compliance Schedule) with specific RFI deadlines for each site.
- The sites at RSA were originally organized into 18 Operable Units (OUs). The arsenal was divided into OUs based on watershed locations, critical and sensitive ecological habitats, soil types, and land use.*
- Based on the potential evidence of off-site contaminant migration and the potential for significant interconnection among groundwater contamination sites at RSA due to Karst formations, Redstone initiated an installation-wide hydrogeological study. This study yielded the "Karst Report", as it has come to be known, dated May 2003. The Karst report documented the highly interconnected nature of groundwater at the facility and the potential for rapid and long-distance contaminant transport. It also documented significant connection between groundwater and surface water. These interconnections provide conduits for contaminant transfer from groundwater to surface media via springs and other artesian structures, as well as opportunities for contaminants in surface water to enter groundwater via sinkholes and other hydrogeologic features characteristic of "losing reaches" of streams.

Based on these findings, a decision was made to separate surface media (primarily surface and subsurface soil) from groundwater. Eight groundwater sites have been established based on data from the Karst Report.* This should allow more focused interpretation of surface media contaminants as posing either: a) human health or ecological risks from surface soil or sediment exposure pathways, or b) principle threat source material serving to contaminate groundwater (either locally or at significant off-site distances).

- Twelve "integrator operable units" (IOUs) have been established as sites to be investigated within RSA. IOU sites are necessary to enable comprehensive evaluation of human health and ecological risks from multiple contaminants originating at multiple sites, both surface media and groundwater. These IOUs will enable corrective measures at multiple sites to establish common sampling points and common points of compliance.*

*NOTE: These issues were identified prior to the renewal of RSA's AHWMMMA permit in 2010, during which time RSA was largely managed under CERCLA lead. These issues are currently being addressed under the permit, but the IOU decisions may still influence how some of the sites are managed throughout the RCRA corrective action process.

2.2.4 Anniston Army Depot (ANAD)

- ANAD is the only Army depot capable of performing maintenance on both heavy and light-tracked combat vehicles and their components. The depot is designated as the Center of Technical Excellence for the M1 Abrams Tank and is the designated candidate depot for the repair of the M60, AVLB, M728 and M88 combat vehicles. ANAD has assumed responsibility for the towed and self-propelled artillery, as well as the M113 Family of Vehicles. The depot also rebuilds the Interim Armored Vehicle (IAV) Stryker.
- The depot performs maintenance on individual and crew-served weapons, as well as land combat missiles and small arms. Additionally, the maintenance and storage of conventional ammunition and missiles are significant parts of the depot's overall missions and capabilities.
- Key tenant organizations on the depot include the Anniston Munitions Center (ANMC), the Civilian Personnel Advisory Center (CPAC), Dear Clinic, Defense Logistics Agency (DLA), Defense Printing Services, Historical Clearing House, U.S. Army Historical Clearinghouse, U.S. Army Military History, the Defense Reutilization and Marketing Office (DRMO), Directorate of Contracting, Industrial Hygiene, and Test Measurement Diagnostic Equipment.
- Information pertaining to ANAD include:
 - 2,444 buildings/structures;
 - 430 miles of roadway;
 - 93 miles of fencing, and;
 - 37 miles of railroad.
- ANAD is a RCRA permitted TSD facility, subject to RCRA Corrective Action. The initial permit was issued on April 20, 1987 and was last renewed on November 14, 2007. ANAD has four permitted storage buildings and three Conventional Waste Munitions storage igloos, which were permitted in April 2004. Additionally, the permit previously included the hazardous waste incineration of chemical agent munitions at the Anniston Chemical Agent Disposal Facility (ANCDF), which began on August 9, 2003 and ended on September 22, 2011. The ANCDF underwent RCRA clean closure as of September 30, 2014. The OB/OD units operated under interim status until September 25, 2009 when they became RCRA permitted units. The OB/OD units are operated by the ANMC. The former buffer area of the historical OD operations is currently under investigation by the MMRP. In addition to the OB/OD operations, a Dynasafe Static Detonation Chamber (SDC) was permitted on May 5, 2010 initially to destroy energetics associated with mustard mortars. Projected future uses of the SDC include destruction of conventional recovered rounds. In addition to the SDC, a Thermal Treatment Closed Disposal Process (TTCDP) was permitted on September 10, 2015. This process involves the treatment of grenade submunitions from the Multi-Launch Rocket System (MLRS) demilitarization. There are currently 48 SWMUs and AOCs requiring investigation and/or remediation.

- ANAD, formerly designated as the Anniston Ordnance Depot, was constructed during 1941 to serve as a munitions storage facility. It occupies approximately 15,200 acres and is located in Calhoun County in northeast Alabama (AL). ANAD primarily consists of the NPL Southeast Industrial Area (SIA) (approximately 525 acres), the non-NPL Ammunition Storage Area (ASA), and support facilities, such as office buildings and warehouses, in the Western Industrial Area (WIA).
- From its origin in 1942 as a storage depot, ANAD has transformed into a state-of-the-art maintenance facility. The storage, maintenance, and industrial functions of ANAD have historically resulted in the generation of hazardous wastes. Typical waste-generating processes at ANAD have included vapor degreasing, metal cleaning, sandblasting, electroplating, and painting. Generated solid and liquid wastes have included metals, cyanide, phenols, pesticides, herbicides, chlorinated hydrocarbons, petroleum hydrocarbons, solvents, acids, alkalies, chelating agents, asbestos, and creosote. Beginning sometime around the 1940s through the late 1970s, wastes generated at ANAD were disposed of on-site in trenches, lagoons, landfills, or other holding vessels as allowed by law during that time period.
- A majority of the non-munitions-related waste generating and subsequent waste disposal activities at ANAD have occurred within the SIA. Investigations addressing the quality of groundwater at ANAD have revealed that contaminants migrated to the groundwater. As a result of groundwater contamination, the SIA was placed on the NPL in 1989. In June 1991, ANAD entered into a Federal Facility Agreement (FFA) with ADEM and the USEPA to establish a procedural framework and schedule for developing, implementing, and monitoring appropriate response actions to contamination problems in the SIA.
- The groundwater flow system in the ANAD area is complex and is the result of the interplay of several factors. The most important components of the regional hydrogeology affecting ANAD are the thickness of the unconsolidated zone, the secondary porosity of the bedrock, and the existence of nearby artesian, potentially fault-controlled, groundwater flow pathways. The primary elements for the hydrogeologic model are derived from observations made during the drilling of shallow and deep environmental monitoring wells in the ANAD area. Refinements to the model were possible based on the findings of the groundwater tracer test.
- Progressing from shallow to deep within the groundwater system, the following elements are present:
 - A shallow unconsolidated groundwater zone within low-permeability, sandy to silty clay residuum (including discontinuous perched groundwater)
 - A groundwater zone that exists between the contact of the residuum and the weathered bedrock (characterized by numerous solution enhance fractures), and an irregular contact with the more competent

bedrock below. (The irregular hydrologic contact between the weathered and competent bedrock is derived by differential weathering of the bedrock.)

- A bedrock zone characterized by a fracture and conduit flow system with relatively impermeable dolostone matrix blocks
- Soil and groundwater contamination has resulted from past waste disposal/storage practices. The ASA (all media) has largely been addressed. In the SIA, there are four areas identified as the primary sources of groundwater contamination: 1) SWMU 1 (Trench Area in the northwest), which is the former containerized waste site Z-1 Trench Site, 2) SWMU 12, which is the former Building 414 lagoons, 3) the northeast lagoon area, and 4) the main industrial area. Soils have largely been addressed. Groundwater has been investigated, but further investigation is required.

2.2.5 Alabama Army Ammunition Plant (ALAAP)

- The ALAAP facility is a BRAC NPL site located in Childersburg, Alabama.
- The ALAAP facility was operated between 1942 and 1945 to produce nitrocellulose single-base smokeless powder, and nitroaromatic explosives (2,4,6-trinitrotoluene [TNT], 2,4-dinitrotoluene [DNT], and tetryl). In addition, the plant produced sulfuric and nitric acids and other chemicals necessary for mission related materials.
- The original facility consisted of 13,233 acres of land. The majority of this property (Area A) was remediated to unrestricted use and sold to private owners around 1991. The remaining portion of ALAAP designated as Area B includes 2,187 acres and was transferred to the City of Childersburg in 2002 with commercial/industrial use restrictions along with groundwater restrictions. The City is developing the property as an industrial park. Soils in Area B have been remediated. Groundwater in Area B is currently being investigated to characterize the nature and extent of known explosives-related contamination, determine the potential for release and migration of the contamination, and determine the risks of detected contaminants to both human health and ecological receptors.
- A 3-year groundwater monitoring program began in Fall 2010 in order to gain additional information about the groundwater contamination at Area B. A Feasibility Study has been completed and is currently being reviewed by EPA and ADEM. However, there is consensus that additional investigation in some areas is required.

2.2.6 U.S. Army Aviation Center of Excellence (Fort Rucker)

- Fort Rucker is an active U.S. Army facility located in Southeast Alabama within both Dale and Coffee Counties. Fort Rucker occupies 62,914 acres. In addition to the main reservation, the post includes 1,297 acres at Cairns Army Airfield, 292 acres at Shell Army Helipoint, and small stage fields

located within a five-county area. Initially established as an infantry training center, the focus of the base shifted to Aviation training in 1954. Fort Rucker now serves as the headquarters for Army Aviation.

- The base is currently home to the U.S. Army Garrison Fort Rucker, the U.S. Army Aviation Center of Excellence, and multiple other tenants including Army Materiel Command, Army National Guard, Forces Command, Medical Command, Training and Doctrine Command, U.S. Army Reserves, U.S. Air Force and Veterans Administration activities, U.S. Army Combat Readiness Center, U.S. Army Warrant Officer Career College, U.S. Army Aviation Center Logistics Command, U.S. Army Aeromedical Center & Lyster Health Clinic, U.S. Army Aeromedical Research Laboratory, U.S. Army School of Aviation Medicine, U.S. Army Air Traffic Services Command, and the 164th Theater Airfield Operations Group.

- The regulatory milestones and issues relevant at Fort Rucker are as follows:
 1. Fort Rucker is under an Alabama Hazardous Wastes Management and Minimization Act (AHWMMA) Permit.
 2. Fort Rucker does not currently store any hazardous wastes for greater than 90 days.
 3. In 1988 an Interim RCRA Facility Assessment (IRFA) was performed. The IRFA identified 92 SWMUs and 12 AOCs.
 4. A RFI was finalized in 1995. The RFI investigated 32 SWMUs and 5 AOCs, many of which were given No Further Action (NFA) status.
 5. Fort Rucker's primary contaminants of concern include chlorinated solvents, metals, and UXO, and the affected media include groundwater and soils.
 6. The current AHWMMA permit requires corrective action at SWMUs 2d, 4, 10/15, 14, AOC-P, and AOC-S, all of which consist of groundwater contamination plumes.
 7. The AHWMMA permit currently requires RFIs at five sites:
 - Sites AOC-W and AOC-X contain MEC and MC contamination. These AOCs are the sites of former training ranges that are no longer operational. Presently AOCs W and X are located on the Silver Wings Golf Course, a golf course located within Fort Rucker that is accessible to the public. AOCs W and X are being addressed under the Military Munitions Response Program (MMRP). A time-critical removal action (TCRA) was performed at these sites in which 1,545 MEC items and 14,684 rocket motors were destroyed. Contamination remains in place at AOCs W and X. An RFI was performed during the course of the TCRA which developed an initial boundary for the MRS, but a second RFI is being conducted to expand the investigation area and better delineate the extent of contamination.

 - AOC AB is the site of an overturned jet fuel truck spill that has resulted in groundwater contamination.

- SWMU 4 is a closed sanitary landfill used for disposal of municipal and household wastes from 1977 to 1982. An RFI conducted in 1991 indicated VOCs and metals contamination in groundwater at this site. Routine groundwater monitoring has been conducted at SWMU 4 since July 1997. Fort Rucker is currently performing an additional RFI to investigate the migration of groundwater contamination past the original boundary wells. Additional wells have been installed and monitoring is underway.
- SWMU 97 consists of over 36 acres, including approximately 14 acres occupied by the Fort Rucker Primary School property, of which over 6 acres is a fenced playground area behind the school building, and approximately 22 acres of wooded area extending to the northwest. A subsurface investigation at the school property identified the presence of buried construction debris and associated soil contamination, primarily semi-volatile organic compounds (SVOCs) and metals. A RFI is currently underway to determine nature and extent of contamination at the site.

2.2.7 Other MEC Sites

- The scope of this project may be expanded or modified to include other active, inactive or FUD sites on a case-by-case basis.

2.3 General MEC Qualifications

- The Contractor shall be knowledgeable in all investigative tools and technologies related to UXO/OE identification and cleanup (examples include, but are not limited to, EM-61, Site Stats/Grid stats, Advanced Geophysical Classification) and risk methodologies (examples include, but are not limited to, OE Cert and Ordnance and Explosives Risk Impact Assessment [OERIA]).
- The Contractor shall be knowledgeable in current UXO/OE affairs related to investigation and cleanup at other military bases nationwide.
- The Contractor shall be familiar with Federal, State and Local rules, regulations and guidance that apply to MEC including, but not limited to, the items mentioned in 2.1 above.
- The site visit and field oversight tasks could potentially require the Contractor to enter into the exclusion zone to observe real-time investigative and intrusive work at Fort McClellan, Camp Sibert, Redstone Arsenal, Anniston Army Depot, Fort Rucker, or other sites. As a result, the Contractor is required to develop and implement a Health and Safety Program in compliance with the Requirements of the Occupational Safety and Health Administration (OSHA) Standard 29 CFR 1910.120(b)(1) through (b)(4) and paragraph 10.2.6, DID OT-005. The Contractor's health and safety plan should be submitted to ADEM within 30 days after receiving notice to proceed by ADEM.

2.4 General Limitations

- The scope of this RFP is meant to provide for an independent Contractor the review of all UXO/OE-related submittals and field activity, as outlined herein.
- In order to maintain the independence of the UXO/OE submittal reviews, the successful bidder is to avoid discussions regarding contract activity with the Army or the Army's direct Contractor(s), except in the presence of an ADEM project representative or except as required to arrange for travel to the installation, or as expressly approved by the Department.
- ADEM reserves the right to reject any and all proposals.
- ADEM reserves the right to partially fund each task and subtask, depending upon the specific project needs and the needs of the Department over the course of the contract performance period.

3. TECHNICAL SERVICES FOR FORT McCLELLAN

3.1 (TASK 1) Perform Review of Documents

- ADEM will provide copies of several (five to ten) historical background documents regarding the site. These documents will be submitted to the successful bidder and are to be reviewed to gain relevant knowledge of site conditions and also to understand the extent of prior UXO/OE identification and removal work completed at the site.
- The Contractor's scope shall include the technical and regulatory review of documents to be received by ADEM during FY23, FY24 and FY25. The documents to be reviewed will vary in length and complexity depending on site conditions. It is anticipated that approximately 70 documents, between the Army, the National Guard, and the MDA, will be received by ADEM with the potential to be submitted for Contractor review. These documents may consist of such documents as, but not limited to, RFI Work Plans and/or Reports, CMI Work Plans and Reports, Feasibility Studies, Interim Measures Work Plans and Reports, Remedial Investigation documents, Remedial Action documents, and Human Health and/or Ecological Risk Assessments.
- ADEM or the Army/MDA (as requested by the Department) will transmit the above Fort McClellan submittals to the Contractor upon receipt by the Department. The Contractor will review the submittals and send written review comments directly to ADEM in a timely manner. The turnaround time for receipt of Contractor's comments will be stated at the time of transmittal. The Contractor's written review comments should be received by ADEM as soon as possible, but not later than 30 days from the date of receipt of the document. The Contractor's review comments should be submitted via electronic delivery (e-mail) and via first class mail when requested by the Department.

- Other documents not listed here may be submitted to ADEM during the performance period, and ADEM reserves the right to modify the agreement by increasing or decreasing the scope to address revised project requirements, including the substitution of other submittals in lieu of those listed herein. It is understood that additional work would be conducted at an additional cost to be agreed upon at a later date, should this scope increase occur. Such additional scope (and associated costs) must be agreed upon in writing in advance of conducting such additional work.

4. TECHNICAL SERVICES FOR CAMP SIBERT

4.1 (TASK 2) Perform Review of Documents

- ADEM will provide copies of several (five to ten) historical background documents regarding the site. These documents will be submitted to the successful bidder and are to be reviewed to gain relevant knowledge of site conditions and also to understand the extent of prior MEC identification and removal work completed at the site.
- The Contractor's scope shall include the technical and regulatory review of documents to be received by ADEM during FY23, FY24 and FY25. The documents to be reviewed will vary in length and complexity depending on site conditions. It is anticipated that approximately 9 documents will be received by ADEM with the potential to be submitted for Contractor review. These documents may consist of such documents as, but not limited to, Feasibility Studies, Remedial Investigation documents, Remedial Design documents, Remedial Action documents, and Human Health and/or Ecological Risk Assessments.
- ADEM will transmit the above Camp Sibert submittals to the Contractor upon receipt by the Department. The Contractor will review the submittals and send written review comments directly to ADEM in a timely manner. The turnaround time for receipt of Contractor's comments will be stated at the time of transmittal. The Contractor's comments should be received by ADEM as soon as possible, but not later than 30 days from the date of receipt of the document. The Contractor's review comments should be submitted via electronic delivery (e-mail) and via first class mail when requested by the Department.
- Other documents not listed herein may be submitted to ADEM during the performance period, and ADEM reserves the right to modify the agreement by increasing or decreasing the scope to address revised project requirements, including the substitution of other submittals in lieu of those listed herein. It is understood that additional work would be conducted at an additional cost to be agreed upon at a later date, should this scope increase occur. Such additional scope (and associated costs) must be agreed upon in writing in advance of conducting such additional work.

5. TECHNICAL SERVICES FOR REDSTONE ARSENAL

5.1 (TASK 3) Perform Review of Documents

- ADEM will provide copies of several (five to ten) historical background documents regarding the site. These documents will be submitted to the successful bidder and are to be reviewed to gain relevant knowledge of site conditions and also to understand the extent of prior MEC identification and removal work completed at the site.
- The Contractor's scope shall include the technical and regulatory review of documents to be received by ADEM during FY23, FY24 and FY25. The documents to be reviewed will vary in length and complexity depending on site conditions. It is anticipated that approximately 170 documents will be received by ADEM with the potential to be submitted for Contractor review. These documents may consist of such documents as, but not limited to, RFI Work Plans and/or Reports, CMI Work Plans and Reports, Interim Measures Work Plans and Reports, and Human Health and/or Ecological Risk Assessments.
- ADEM will transmit Redstone Arsenal submittals to the Contractor upon receipt by the Department. The Contractor will review the submittals and send written review comments directly to ADEM in a timely manner. The turnaround time for receipt of Contractor's comments will be stated at the time of transmittal. The Contractor's written review comments should be received by ADEM as soon as possible, but not later than 30 days from the date of receipt of the document. The Contractor's review comments should be submitted via electronic delivery (e-mail) and via first class mail when requested by the Department.
- Other documents not listed herein may be submitted to ADEM during the performance period, and ADEM reserves the right to modify the agreement by increasing or decreasing the scope to address revised project requirements, including the substitution of other submittals in lieu of those listed herein. It is understood that additional work would be conducted at an additional cost to be agreed upon at a later date, should this scope increase occur. Such additional scope (and associated costs) must be agreed upon in writing in advance of conducting such additional work.

6. TECHNICAL SERVICES FOR ANNISTON ARMY DEPOT

6.1 (TASK 4) Perform Review of Documents

- ADEM will provide copies of several (five to ten) historical background documents regarding the site. These documents will be submitted to the successful bidder and are to be reviewed to gain relevant knowledge of site conditions and also to understand the extent of prior MEC identification and removal work completed at the site.
- The Contractor's scope shall include the technical and regulatory review of documents to be received by ADEM during FY23, FY24 and FY25. The documents to be reviewed will vary in length and complexity depending on site conditions. It is anticipated that approximately 30 documents will be received by ADEM with the potential to be submitted for Contractor review. These

documents may consist of RFI Work Plans and/or Reports, CMI Work Plans and Reports, Feasibility Studies, Interim Measures Work Plans and Reports, Remedial Investigation documents, Remedial Action documents, and Human Health and/or Ecological Risk Assessments.

- ADEM will transmit the above Anniston Army Depot submittals to the Contractor upon receipt by the Department. The Contractor will review the submittals and send written review comments directly to ADEM in a timely manner. The turnaround time for receipt of Contractor's comments will be stated at the time of transmittal. The Contractor's comments should be received by ADEM as soon as possible, but not later than 30 days from the date of receipt of the document. The Contractor's review comments should be submitted via electronic delivery (e-mail) and via first class mail when requested by the Department.
- Other documents not listed herein may be submitted to ADEM during the performance period, and ADEM reserves the right to modify the agreement by increasing or decreasing the scope to address revised project requirements, including the substitution of other submittals in lieu of those listed herein. It is understood that additional work would be conducted at an additional cost to be agreed upon at a later date, should this scope increase occur. Such additional scope (and associated costs) must be agreed upon in writing in advance of conducting such additional work.

7. TECHNICAL SERVICES FOR FORT RUCKER

7.1 (TASK 5) Perform Review of Documents

- ADEM will provide copies of several (five to ten) historical background documents regarding the site. These documents will be submitted to the successful bidder and are to be reviewed to gain relevant knowledge of site conditions and also to understand the extent of prior MEC identification and removal work completed at the site.
- The Contractor's scope shall include the technical and regulatory review of documents to be received by ADEM during FY23, FY24 and FY25. The documents to be reviewed will vary in length and complexity depending on site conditions. It is anticipated that approximately 14 documents will be received by ADEM with the potential to be submitted for Contractor review. These documents may consist of RFI Work Plans and/or Reports, CMI Work Plans and Reports, Feasibility Studies, Interim Measures Work Plans and Reports, and Human Health and/or Ecological Risk Assessments.
- ADEM will transmit the above Ft. Rucker submittals to the Contractor upon receipt by the Department. The Contractor will review the submittals and send written review comments directly to ADEM in a timely manner. The turnaround time for receipt of Contractor's comments will be stated at the time of transmittal. The Contractor's comments should be received by ADEM as soon as possible, but not later than 30 days from the date of receipt of the document. The

Contractor's review comments should be submitted via electronic delivery (e-mail) and via first class mail when requested by the Department.

- Other documents not listed herein may be submitted to ADEM during the performance period, and ADEM reserves the right to modify the agreement by increasing or decreasing the scope to address revised project requirements, including the substitution of other submittals in lieu of those listed herein. It is understood that additional work would be conducted at an additional cost to be agreed upon at a later date, should this scope increase occur. Such additional scope (and associated costs) must be agreed upon in writing in advance of conducting such additional work.

8. (TASK 6) SITE VISITS AND MEETINGS (ALL SITES)

- The Contractor should anticipate scheduling quarterly field visits/site meetings, each lasting a period of two to three days, depending on the type of MEC work in progress and the particular documents under review. One to two Contractor personnel should attend these meetings. It will be the Contractor's responsibility to coordinate these meetings and site visits with ADEM and to coordinate the scope of any field activities with ADEM in advance. The purpose of these field visits is to stay keenly aware of ongoing field activities and field protocols, such that the selected Contractor will understand site conditions in order to facilitate its ensuing review of submittals (along with associated geophysical data).
- The Contractor's Proposal should allow 20 additional one- to two-day site visits and/or meetings for either MEC or HTRW related issues. The Contractor may be required to participate at various partnering meetings for each site. One to two Contractor personnel should attend the meetings. The purpose of these meetings and site visits will depend on the type of MEC work in progress and the documents under review. It will be the Contractor's responsibility to coordinate these meetings and site visits with ADEM and to coordinate the scope of field activities with ADEM in advance.
- The Contractor's Proposal should advise ADEM of the need, if warranted, of any additional site visits and meetings that may be required to meet the objectives of the stated MEC investigations. The scope and cost of any additional meetings should be outlined separately.
- ADEM reserves the right to hold a status conference call once per month with the selected Contractor. The Contractor shall also hold an appropriate number of conference calls, routine correspondence, and other regular contact with ADEM project managers.
- It is understood that additional meetings and site visits would be conducted at an additional cost to be agreed upon at a later date, should this scope increase occur. Such additional scope (and associated costs) must be agreed upon in writing in advance of conducting such additional work. The Contractor's Proposal will list the number of any additional site visits and meetings required to meet the objectives of the stated MEC or HTRW investigations.

9. HAZARDOUS, TOXIC, AND RADIOLOGICAL WASTE SUBMITTAL REVIEW

9.1 (TASK 7) General HTRW Technical Services

- The Contractor shall be knowledgeable in RCRA and Superfund programs, including CERCLA.
- The Contractor shall be familiar with the interpretation and implementation of environmental regulations related to HTRW, including Federal, State, and Local regulations, and various technical guidance that apply to DoD, CERCLA, and RCRA cleanup programs.
- The Contractor's proposal shall provide costs for technical and regulatory review for approximately 30% of the various documents anticipated to be submitted to the Department, to address the investigation and remediation of HTRW impacted sites. The submittals to be reviewed will vary in length and complexity depending on the specific site conditions. ADEM may submit the document in draft or final form. These submittals may include work plans and reports for Preliminary Assessments, Site Investigations, Remedial Investigations (RI), Feasibility Studies (FS), Ecological Risk Assessments, Baseline Ecological Risk Assessments, Human Health Risk Assessments, Engineering Evaluations and Cost Analyses, Proposed Plans, Records of Decision, RCRA Facility Investigations, Corrective Measures Implementation Plans, etc. During the RI/FS project phases, ADEM may also submit documents related to treatability and pilot test studies.

9.2 (TASK 8) Ecological and Human Health Risk Components

The Contractor's Proposal shall focus on the review of all Human Health and Ecological Risk Assessment portions of the submittals, unless otherwise specified by the Department.

9.2.1 Ecological Risk Component

The ecological risk assessment evaluates the potential impacts of contaminants from a contaminated site on plants and animals other than humans and domesticated species. The functions of the ecological risk assessment are to:

- Document whether actual or potential risks exist at a site;
- Identify which contaminants present at a site pose an ecological risk; and
- Generate data to be used in evaluating cleanup options.

The Contractor will receive ERA deliverables that may include the following eight steps, including analysis of several scientific/management decision points (SMDPs) encountered during the ERA process:

- **STEP 1: SCREENING LEVEL**
Problem formulation

Toxicity evaluation

- STEP 2: SCREENING LEVEL
Exposure estimates
Risk calculation
- STEP 3: PROBLEM FORMULATION
Questions/Hypotheses
- STEP 4: STUDY DESIGN AND DATA QUALITY OBJECTIVES
PROCESS
Lines of evidence
Measurement endpoints
- STEP 5: VERIFICATION OF FIELD SAMPLING DESIGN
- STEP 6: SITE INVESTIGATION AND DATA ANALYSIS
- STEP 7: RISK CHARACTERIZATION
- STEP 8: RISK MANAGEMENT

9.2.2 Human Health Component

- The human health risk evaluation process provides a framework for developing the risk information necessary to assist decision-making at remedial sites. Specific objectives of the human health risk evaluation process are to:
 - Provide an analysis of baseline risks and help determine the need for action at sites;
 - Provide a basis for determining levels of chemicals that can remain onsite and still be adequately protective of public health;
 - Provide a basis for comparing potential health impacts of various remedial alternatives; and
 - Provide a consistent process for evaluating and documenting public health threats at sites.
- The above human health evaluation activities may be conducted during several stages of the remedial action process. As a result, the Contractor may receive the following submittals under the subject scope of work:
 - Project scoping documents (before the RI/RFI)
 - Site characterization documents (RI/RFI)

- Detailed analysis of remedial alternatives documents Feasibility Study/Corrective Measures Study (FS/CMS). The HHRA is closely linked with the establishment of the remedial action objectives, and with the development of screening of alternatives.
- Final remedial decision documents (EE/CA, ROD, CMI)
- ADEM will transmit the selected HTRW submittals to the Contractor upon receipt by the Department. The Contractor will review the submittals and send written review comments directly to ADEM in a timely manner. The turnaround time for receipt of Contractor's comments will be stated at the time of transmittal. The Contractor's written review comments should be received by ADEM as soon as possible, but not later than 30 days from the date of receipt of the document. The Contractor's review comments should be submitted via electronic delivery (e-mail) and via first class mail when requested by the Department.
- Other documents may be submitted to ADEM during the performance period and ADEM reserves the right to modify the agreement by increasing or decreasing the scope to address revised project requirements. It is understood that additional work, if any, would be conducted at an additional cost to be agreed upon at a later date, should this scope increase occur. Such additional scope (and associated costs) must be agreed upon in writing in advance of conducting such additional work.

9.3 Technical Services for Other Sites

- The scope of this project may be expanded or modified to include other FUD sites, or other active or inactive DoD or non-DoD sites on a case-by-case basis. For these other sites, other documents may be submitted to ADEM during the performance period, and ADEM reserves the right to modify the agreement by increasing or decreasing the scope to address these additional or substituted project requirements. It is understood that additional work would be conducted at an additional cost to be agreed upon at a later date, should a scope increase take place. Such additional scope (and associated costs) must be agreed upon in writing in advance of conducting such additional work.

10. CONTENT OF PROPOSAL

The technical proposal should contain sections addressing the following five (5) areas in sequential order:

10.1 Cost Proposal

- An itemized list of Labor Hours and Expenses to provide document review of the submittals identified in Sections 3, 4, 5, 6, 7, 8, and 9 above. Please list anticipated level of effort on a unit cost basis (per type of document) and the total cost for each of the 8 tasks per site.

- Proposed costs of one optional year of UXO/OE and HTRW support to ADEM. The additional year is anticipated to require the same level of effort as the first contract period. ADEM may or may not decide to implement the Option year. A decision on the Option year will not be made until the beginning of 2025.
- All costs are to be provided on a time and materials basis. A not-to-exceed cost for each site per task should be presented (exclusive of additional scope that may be later defined and agreed upon).

10.2 General Information Regarding Firm

Provide the following information in a clear and concise format:

- Firm name, street address, mailing address, phone number, fax number, and website address (if any)
- Name of key contact, phone number, fax number, and e-mail address
- Date of firm's incorporation and/or organization
- Is firm registered with the Alabama Secretary of State's Office and the Alabama Department of Revenue, Franchise Tax Division? (Each consultant should contact these two agencies to determine if their firm will be required to be registered with the agencies.)
- Is the proposal a joint venture or joint relationship arrangement? (A joint relationship is an agreement to work together without the requirement to assume liabilities of the other company.)

If yes, information from Tasks 1 through 8 must be provided for each firm listed in the joint venture or joint relationship arrangement.

- Has the firm (or any key personnel) currently or has it ever contracted with other DoD components (including, but not limited to, Corps of Engineers) or MDA or has the firm (or key personnel) otherwise ever worked at Fort McClellan, Camp Sibert, Redstone Arsenal, Anniston Army Depot, ALAAP, Fort Rucker, or other DoD sites in Alabama? If yes, please describe the work that was done and the present or historical contractual relationship and time period.
- Has the firm (or any key personnel) ever been the subject of any environmentally related enforcement action (e.g., Notice of Violation, Administrative Order, Court Judgment, etc.) by any state, federal or other entity? If so, provide a description of such action(s).
- Does the firm agree to preserve the integrity of the Department's security and confidentiality? The firm shall uphold all applicable laws pertaining to implementation of the duties described herein to include the confidentiality of information as described in this RFP.

- Are or will all workers providing the services described in this RFP be either citizens of the United States or are in proper and legal immigration status that authorizes them to be employed for pay within the United States, or have satisfied requirements of Alabama law and the Secretary of State including requirements pursuant to Section 10A-1-7.04, Code of Alabama 1975?

10.3 Statement of Qualifications

10.3.1 Background and Experience of Personnel Who Will Perform the Work

Provide a resume for all key professional personnel assigned to this project, including all key subcontractor professional personnel. Clearly specify which personnel are in-house and which are subcontracted. Include their qualifications, specialized experience gained during their career, and their proposed responsibility for this project. Project responsibility should be indicated as supervision, project management, submittal review, report and plan preparation, fieldwork and/or other.

For key professional personnel, provide the type of degree(s) each person has earned, the year each degree was granted, and the college/university from which each degree was obtained.

Each technical proposal must include a professional engineer and a professional geologist who are registered in the State of Alabama and on staff as a full-time employee(s). Professional engineering services may be satisfied through a subcontractor, joint venture, or joint relationship arrangement. If this is the case, it should be clearly identified as such.

10.3.2 Past Performance Information

Interested firms shall submit a list of all contracts and subcontracts completed within the last three (3) calendar years, along with all contracts and subcontracts currently in process, which are of similar nature, scope, magnitude, and complexity to that detailed within Sections 3, 4, 5, 6, 7, 8, and 9 above. Contracts and subcontracts listed should include those entered into with Federal, State and local governments, as well as the private sector. Please include the following information for each contract and subcontract:

- Name of contracting entity
- Contract number
- Contract title
- Contract type
- Total contract value
- Period of performance
- Name, address, and telephone number of Contracting Officer

- Name, address, and telephone number of Project Manager
- List of major subcontracts over \$50,000, if applicable
- Brief description of contract or subcontract
- Percent of work accomplished by in-house personnel
- Brief description of the role, if any, of the key professional personnel identified in Section 10.3.1 above
- Description of the firm's and its personnel's (and subcontractors', if applicable) experience with providing independent consulting services to state and federal environmental regulatory agencies.

10.4 Project Organization and Management

A discussion of organization capabilities as well as an organizational chart must be included that clearly represents the firm's capability to provide all the services indicated in Sections 3, 4, 5, 6, 7, 8, and 9 above. The organizational chart must clearly indicate the individuals and their associated firms that will be responsible for each specific activity.

All subcontractors must be identified and their intended scope of work clearly detailed. All joint ventures or joint relationship arrangements must be clearly represented. Any part-time employees must identify their primary employer and indicate whether their part-time work on any other projects would constitute a conflict of interest.

Interested firms should also highlight and describe the firm's procedures and protocols to prevent conflicts of interest between the work to be performed for ADEM and any other work conducted by the firm and its personnel, including its subcontractors and their personnel.

Management methods in the following areas must be discussed:

- Use of subcontractors
- Cost control
- Schedule control
- Project tracking
- Data management

10.5 Quality Assurance (QA) Program Plan

Interested firms shall submit a Quality Assurance (QA) program plan that establishes their commitment, competence, and methodology for ensuring adequate quality controls. This plan shall address the following:

- Statement of policy concerning the organization's commitment to Quality Control/Quality Assurance

- An organizational chart showing the position of QA functions and/or persons within the organization, with preference given to QA functions or persons that remain independent of functional groups that directly generate products and services
- Delineation of assigned authority and responsibilities of QA functions/persons and other functional groups within the organization
- The range and magnitude of experience in developing and applying Quality Control/Quality Assurance safeguards
- Background and relevant experience of the proposed personnel in implementing QA protection for projects comparable to those identified in Sections 3, 4, 5, 6, 7, 8, and 9 above
- The firm's general approach for accomplishing the QA with regards to Sections 3, 4, 5, 6, 7, 8, and 9 above

11. PROPOSAL SUBMITTAL INFORMATION

- The deadline for receipt of written technical proposals is 5:00 p.m., December 2, 2022.
- Three (3) copies of the technical proposals shall be submitted by certified mail or other mailing method that provides the sender a receipt to:

Mr. Daniel Arthur, Chief
 Facilities Engineering Section
 Governmental Hazardous Waste Branch
 Land Division
 Alabama Department of Environmental Management
 P.O. Box 301463
 Montgomery, Alabama 36130-1463

- An original signed transmittal letter must accompany each copy of the technical proposal. The letter shall provide the name, title, address, and telephone number of the official contact and the alternate contact.
- The Department expects the evaluation of proposals to be completed by April 28, 2023, at which time all firms submitting proposals will be notified. The Department reserves the right to reject any and all proposals. This notice in no way shall be considered an offer or in any way shall obligate the Alabama Department of Environmental Management or the State of Alabama.

12. PROPOSAL EVALUATION FACTORS

Technical proposals will be independently evaluated by members of a review committee consisting of Department staff members based on the following factors:

- Past Performance

- Qualifications of Key Personnel
- Project Organization and Management
- Quality Assurance Program Plan
- Cost
- Proposed Approach to Provide Technical Services