AMSIO-SF (385-11e) 13 March 2000

MEMORANDUM FOR AMSIO-ACE-D (Mr. Matthys)

SUBJECT: Request for Proposal, Allied Technology Group (ATG), Release Surveys for Fort McClellan Commodity Storage Sites, Project Number USA 99-100, Phase II

1. The attached scope of work (SOW) is for radiological release surveys of several new buildings and outdoor areas at Fort McClellan. The Army Corps of Engineers, Historical Archives report identified these new areas as having used radioactive materials. Please forward the SOW to ATG and request a cost estimate and technical proposal.

2. We recommend ATG for this effort based on their vicinity to the project site, their familiarity with this type effort and the fact that they have an extensive working relationship with the site.

3. The POC is Mr. Mike Styvaert, AMSIO-SF, extension 20880, E-mail address StyvaertM.

KELLY W. CROOKS
Leader, Operations Team
Safety/Rad Waste Team

DESCRIPTION OF WORK
DEPARTMENT OF THE ARMY
US ARMY CHEMICAL SCHOOL
FORT McCLELLAN, ALABAMA
RADIOLOGICAL SURVEYS FOR COMMODITY USE AREAS
USA 99-100, PHASE II

Fort McClellan is comprised of two parts, the Main Post and Pelham Range. The installation occupies approximately 41,000 acres adjacent to Anniston, AL. The Main Post encompasses 19,000 acres and contains the majority of the facilities. The Pelham Range is approximately 22,000 acres west of the Main Post.

The Army Base Closure and Realignment Committee (BRAC) has identified Fort McClellan as an installation for closure. The Army must resolve several radiological issues before closing the installation. This scope of work is for the buildings and areas that Fort McClellan used for the storage and routine maintenance on Army radioactive commodities.

The contractor shall develop a radiological survey plan describing the survey methodologies and techniques that they will follow for release of the identified structures. This scope does not address decontamination or decommissioning waste. The contractor shall use the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM), NUREG-1575, for designing the final release survey. We will address future remedial actions and or disposal activities under a separate scope of work.

The contractor shall participate in a 1-day site walk down and regulatory session before starting this effort. We suggest the contractor wait to submit their cost and technical proposal until after the 1-2 day site meeting. We hope to complete the walk down on 11-12 April 2000.

All operations must comply with all applicable federal, state, and municipal laws, rules and regulations including the Defense Appropriations Act as it pertains to the use of ozone depleting substances.

SCOPE OF WORK

FORT McCLELLAN, ALABAMA
RADIOLOGICAL SURVEYS FOR COMMODITY USE AREAS
USA 99-100, PHASE II

1. COORDINATION. The contractor shall coordinate project activities with the installation Environmental point of contact, Ms. Lisa Kingsbury and the HQ, IOC Project Officer, Mr. Mike Styvaert at:

U.S. Army Garrison,
Building 215, 15th Street
ATTN: (Ms. Lisa Kingsbury),
Fort McClellan, AL 36205-5020
Telephone (205) 848-7455
E-mail: kingsburyl@mcclellan-emh2.army.mil

U.S. Army Industrial Operations Command
ATTN: AMSIO-SF, (Mr. Mike Styvaert)
Rock Island, IL 61299-6000
Telephone (309) 782-0880
FAX: (309) 782-2988
E-mail: styvaertm@ioc.army.mil

2. REGULATORY CONCERNS. The contractor shall use the surface release limits in "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses, By-product, Source, or Special Nuclear Materials, (NRC 1987)".

2.1. The contractor shall obtain required permits, licenses and authorizations from federal, state, and municipal agencies necessary to complete this effort.

2.2. The contractor shall obtain a Department of Army Radiation Permit (DARP) IAW Army Regulation (AR) 385-11 for radioactive material brought on-site for more than 15 days. This includes check sources. The contractor may obtain copies of the DARP application form (DA 3777) from the Army POC listed in paragraph 1.

2.3. In accordance with the Defense Appropriations Act, the contractor, in performing the efforts as defined by this scope of work, shall in no way construe the government direction as supporting, suggesting, or directing the use of ozone depleting substances. The contractor shall specifically bid and perform all contractual efforts in compliance with this Act.

3. FACILITIES, EQUIPMENT AND SUPPLIES. The installation will provide limited office space, restroom facilities, facsimile equipment and access to a copy machine. The contractor shall supply all other services (including cell phone coverage), facilities, supplies and equipment necessary to complete this scope of work.

4. WORK PLANS AND HEALTH AND SAFETY PLAN. The contractor shall, as a deliverable item, prepare a Radiological Work Plan that details the proposed final status survey methodology. The contractor shall submit the Plan and receive approval by the IOC, Fort McClellan, the Environmental Protection Agency (EPA), the Nuclear Regulatory Commission (NRC) and the State of Alabama before the field work begins. After completion of the field work and survey effort, the contractor shall prepare a Final Report, which is a deliverable item and considered complete once the IOC, Fort McClellan and the regulatory agencies have reviewed and accepted it.

4.1. Survey Plan. The Survey Plan shall address the safety procedures for on-site work, survey and sampling procedures and criteria, and the radiation protection procedures to minimize potential exposures. The Plan shall address the overall technical approach, sampling and analysis and Quality Assurance/Quality Control (QA/QC). The contractor shall follow the survey design guidance prescribed in MARSSIM, NUREG-1575.

4.1.1. MARSSIM Parameters.

a. Derived Concentration Guideline Values (DCGLs). For surfaces, the contractor shall use (as the DCGLs) the residual surface contamination limits specified in the Federal Register/Volume 62, Number 222/Wednesday, November 18, 1998, pages 64132-64134. The contractor shall also reference the surface limits prescribed in Army Regulation 11-9, and apply the most conservative limit.

b. Decision Errors. The contractor shall assume Type I and Type II decision errors of 0.05 for the initial survey design. The values are subject to change after review by the NRC and other applicable regulatory agencies.

c. Sample Variability. Direct measurement frequency is directly related to the assumed final status survey sample variability. The contractor shall identify the proposed methodology for estimating sample variability and the plan for correcting the survey if the actual sample variability exceeds the assumed value.

d. Scan Minimal Detectable Concentration (MDC). The instrumentation scanning MDC may impact the sample frequency for the final status survey. The contractor shall prepare the survey work plan to include a discussion and the rationale for their scanning instrumentation selection.

e. Area Factors. The contractor survey design shall incorporate the MARSSIM area factor provisions for small-elevated areas of contamination that exceed the DCGL.

f. Area Classifications. We have defined the specific MARSSIM survey classifications in section 5 of this scope of work. If the contractor finds discrepancies with our assumptions during the actual survey work, they shall immediately notify the installation

and IOC. We will then investigate the possibility of revising the area classification.

4.2. Health and Safety Plan. The contractor shall develop a Health and Safety Plan (HASP) specific to this project. Radiation protection standards of 10 CFR 20 and OSHA standards of 29 CFR 1910.120 apply for worker and public protection and shall be incorporated into the HASP. The contractor shall provide operational health physics procedures for all tasks to ensure personnel exposures, environmental releases and contamination are controlled to ALARA (as low as reasonable achievable).

4.2.1. The HASP shall address procedures to reduce hazards and protect workers. Existing site hazards include heavy equipment operations, noise hazards, and unstable building structures. Surveyors shall coordinate each day for access to survey areas, and will notify area supervisors of their actions. Contractor personnel shall use safety equipment such as goggles and hearing protection as appropriate. Examples of expected procedures are:

4.2.2. Prior to a new action occurring, the work is analyzed to determine what possible hazards, safety and radiation, might exist. Once done, procedures are implemented to reduce the risk of these hazards. A certified Health Physicist shall review these procedures.

4.2.3. All contractor personnel shall receive, as a minimum, a briefing on the hazards of the work area, the expected dose, and possible biological effects from receiving that exposure. All contractor personnel working in a restricted area shall wear personal monitoring devices.

4.2.4. The environment in all buildings and surrounding areas is expected to be very low dose rate, and the greatest danger from a radiation safety viewpoint is potential contamination. For most of the operations, only disposable anti-contamination clothing is required. For operations where a possible inhalation hazard exists, contractor personnel shall use NIOSH approved respirators with HEPA filters.

4.2.5. The contractor shall establish control areas at the boundary to areas where the spread of contamination is possible. Using appropriate instrumentation, they shall monitor material or equipment leaving the controlled area for contamination.

4.2.6. The contractor may encounter hazardous materials other than radioactive materials during the survey effort. These materials are likely to include as a minimum, lead based paint, PCBs (including that in light fixture ballasts), mercury (potentially in switches, controls and light tubes and fixtures) and asbestos. The contractor shall identify procedures for the safe handling of such materials in the HASP.

4.3. Quality Assurance/Quality Control (QA/QC) Plan. The contractor shall describe their proposed QA/QC procedures and protocols. Laboratory analyses shall conform to SW-846. If the contractor proposes to use an in-house laboratory for sample

analysis then, as a minimum, they shall duplicate 10% of the samples and have analyzed by an independent third party laboratory. The contractor shall verify instrument operation each day with a check source before use.

5. SITE SPECIFICS. The contractor shall develop and conduct radiological release surveys for the following buildings and outdoor areas at Fort McClellan. The contractor shall design the survey protocol to bias sample locations towards areas with the greatest contamination potential (i.e., rough cracked surfaces, joints, corners, drain traps, change rooms, utility access points, etc.). The contractor may see each area and building during a 1-day pre-proposal site visit. We plan to set up the site walk down no later than mid-April. The Army will provide drawings and maps as appropriate and available.

(1) Building 3182. Status - Vacant. Will check for availability of floor plans. Built in 1954 originally as an Applied Instruction Building, the Fort McClellan Radiological Laboratories used one wing in conjunction with the Hot Cell facility. The building served as the Military Police Corps museum. Total square footage is 11,696. Based on findings of residual activity from the previous survey effort, the contractor shall re-survey the building as a MARSSIM Class I area. The primary radionuclides of concern are H3, Cs137 and Ra226.

(2) Bldg T-810. Status - Vacant. The installation used this structure as a temporary laboratory. The contractor shall survey the building as a MARSSIM Class III area. The primary radionuclides of concern are Cs137, Ra226, Co60 and Sr90.

(3) Bldg T-811. Status - Vacant. The installation used this structure as a temporary laboratory. The contractor shall survey the building as a MARSSIM Class III area. The primary radionuclides of concern are Cs137, Ra226, Co60 and Sr90.

(4) Bldg T-812. Status - Vacant. The installation used this structure as a temporary laboratory. The contractor shall survey the building as a MARSSIM Class III area. The primary radionuclides of concern are Cs137, Ra226, Co60 and Sr90.

(5) Bldg T-836. Status - Demolished. The installation used this structure as a temporary laboratory. The contractor shall survey the building footprint as a MARSSIM Class III area. The primary radionuclides of concern are Cs137, Ra226, Co60 and Sr90.

(6) Bldg T-836A. Status - Vacant. The installation used this structure as a temporary laboratory. The contractor shall survey the building as a MARSSIM Class III area. The primary radionuclides of concern are Cs137, Ra226, Co60 and Sr90.

(7) Bldg T-837. Status - Vacant. The installation used this structure as a temporary laboratory. The contractor shall survey the building as a MARSSIM Class III area. The primary radionuclides of concern are Cs137, Ra226, Co60 and Sr90.

(8) Building 3185, Status - Vacant. The installation used this structure as a personnel decontamination center for training purposes. Students used this building to change clothes and to practice personal decontamination procedures. The contractor shall survey the building as a MARSSIM Class III area. The primary radionuclides of concern are Cs137, Ra226, Co60 and Sr90.

(9) Original Rattlesnake Gulch Area. Status - land area, east of the Anniston Community Center parking lot. The installation will provide a map of the area. The contractor shall conduct a gross gamma/gross beta survey of the area in accordance with MARSSIM class III protocol.

(10) Radiological Survey Area #1. Status - open land area. Fort McClellan developed this area as a replacement for the Rattle Snake Gulch. We believe that the site placed uranium-233 plates on the ground for training purposes. The contractor shall conduct a gross gamma/gross beta survey of the area in accordance with MARSSIM class III protocol.

(11) Field Hot Cell. Status - part of Radiological Survey Area #1. Reported this was a temporary structure made out of cinder blocks and sand bags. It is within the envelope of Radiological Survey Area #1. The contractor shall conduct a gross gamma/gross beta survey of the area in accordance with MARSSIM class III protocol.

(12) Chemical School Radiological Burial Grounds. Status - open land area. Reportedly the installation used this site for radiological burials from 1957-1958. This site includes the Northeast corner of the Anniston Community Center. In the 1958-1959 timeframe the buried radioactive materials were removed. The site conducted a second cleanup in 1971. The contractor shall conduct a gross gamma/gross beta survey of the area in accordance with MARSSIM class III protocol.

(13) Range 25. Status - open land area. The site used this area for a six week period to test prototype source actuators. The radionuclides of concern are Co60 and Cs137. The contractor shall conduct a gross gamma/gross beta survey of the area in accordance with MARSSIM class III protocol.

6. SCHEDULE. The contractor shall be prepared to mobilize within 10 working days after contract award. The contractor shall respond to survey scheduling changes with as little as a 5 working day notification.

7. PERSONNEL. The contractor shall propose a project manager with a minimum of 3-years experience in conducting environmental remediation/restoration efforts, primarily with radioactive material.

7.1. The contractor shall provide resumes of technical personnel with the project proposal.

7.2. On-site personnel must have the training mandated by 29 CFR 1910.120 (40 hours plus 3 days on-site experience). Supervisors

shall have 8 hours of additional supervisory training. The contractor shall provide written evidence of current Occupational Safety and Health Administration training for each person performing work and a Corporate certification that each person is medically capable of working on a hazardous waste site.

7.3. Contractor personnel shall receive and document a briefing on the hazards of the work area, the expected dose, and possible biological effects from receiving that exposure.

8. FINAL REPORT. The contractor shall provide as a deliverable item 6 hard copies of a preliminary draft final report within 30 days after completion of the on-site activities. The contractor shall incorporate Army comments within 30 days of receipt.

8.1. The contractor shall provide as a deliverable item 13 hard copies of the draft final report within 15 days after receipt of the Army comments.

8.2. The contractor shall incorporate regulatory agency comments within 15 working days of receipt. After incorporating regulatory comments, the contractor shall provide as a deliverable item 13 hard copies and 2 compact disc (CD) copies of a comprehensive final report detailing all radiological release surveys. The final report for the Fort McClellan commodity sites shall detail the survey procedures, instrumentation used, findings, results, suggestions, and QA/QC practices and documentation. The report shall address, in detail, the methodology used for the detection, removal, and packaging of radioactive contamination recovered as a result of the effort. The report shall address residual radioactive contamination that was not remediated during the survey effort, as well as hazardous materials and/or wastes identified during the on-site effort.

8.3. The report shall address the contractor's QA program, including calibration dates and certificates and details (including records) on how they calibrated and field checked portable instruments.

8.4. The contractor shall describe (in terms of MARSSIM, NUREG-1575 requirements) the final survey design and how the results meet the MARSSIM statistical tests.

8.5. The contractor-prepared plans and reports developed under this effort will become the property of the U.S. Army. The Army reserves the right to distribute the documents without restriction.

8.6. The contractor shall coordinate final report activities with Mr. Styvaert.

9. REFERENCES.

a. NUREG-1575, Multi-Agency Radiation Survey and Site Investigation Manual, MARSSIM, December 1997.

b. NUREG-1500, Working Draft Regulatory Guide on Release Criteria for Decommissioning: NRC Staff s Draft for Comment.

c. Memorandum, Subject: DA-Wide Policy on Radiological Surveys at BRAC Commodity Sites, dated January 20, 1998.

d. Radiological Historical Assessment, Main Post, Ft. McClellan, AL, U.S. Army Corps of Engineers, St. Louis Engineer District, November 1999.

e. Radiological Historical Assessment, Pelham Range, Ft. McClellan, AL, U.S. Army Corps of Engineers, St. Louis Engineer District, November 1999.

CLASS I OZONE DEPLETING CHEMICALS (ODC)

PART I

A technical evaluation of the Procurement Request (PR) **Fort McClellan, Commodity Site Surveys, USA 99-100,Phase II**
(Description of Supply or Service)
was performed on 3/9/00 and I do hereby state to the contracting officer that to the best of my knowledge and belief:

_____1. The above referenced procurement request is for a commercial item. Therefore, no review for ODC was performed.

X 2. Based on a comparison of the specifications and standards contained in this PR and the DOD list of military specifications and standards that call out the use of ozone depleting chemicals (ODC), I have found no specifications or standards that require the use of a class I ozone depleting chemical (ODC) or a requirement for the use of such a substance or that can be met only through use of such a substance.

_____3. Replacement substances or alternate technologies have been incorporated where applicable; therefore, this PR no longer contains any class I ODC or contractual requirements that can be met only by use of such a substance. These changes have been identified to the contracting officer in writing for inclusion in the solicitation Section C or the purchase description as changes to the appropriate technical documents. If this action is a modification or extension to an existing contract awarded before 1 June 1993 and meets the ODC review criteria, the ODC substitutes or alternate technology will result in an estimated ODC avoidance of _____ pounds. (List pounds saved for each substitute used in modifications to existing contracts awarded before 1 June 1993.)

_____4. This PR contains the following specification or standard that require the use of class I ODC or requirements that can only be met by use of such a substance:

List of ODC Requirement(s) Estimated Pounds of ODC

Signature //signed//
Name **Michael S. Styvaert**
(Technical Evaluator/Reviewer)
Organization **HQ, IOC; AMSIO-SF**
Date 3/9/00

(If block 4 is checked, the approval pursuant to Section 326, Public Law 102-484, is provided below.)

I hereby certify to the approving official that a suitable substitute or alternative technology for the class I ODS is not currently available.

Name_____
(Approved Technical Representative)
Organization_____
Date_____