Response to U.S. Environmental Protection Agency Comments
Draft-Final Site Investigation Report
Former Rifle/Machine Gun Ranges, Parcels 100Q and 101Q
Fort McClellan, Calhoun County, Alabama

General Response to All Comments:

The Army appreciates EPA's input on the Draft-Final SI Report for the Former Rifle/Machine Gun Ranges, Parcels 100Q and 101Q. However, in light of ADEM's concurrence with the conclusions and recommendations of the draft-final report (see attached letter), the Army considers all outstanding issues resolved at this site. Therefore, individual responses to EPA comments have not been provided.

Comments from Doyle T. Brittain, EPA Senior Project Manager, received on December 2, 2003.

GENERAL COMMENTS

Comment 1: **The purpose for this, and any, Site Investigation is to determine whether or not a CERCLA release has occurred. The information provided in the subject report adequately documents that a CERCLA release has occurred and therefore a Remedial Investigation and Feasibility Study (RI/FS) with a Baseline Risk Assessment (BRA) is needed to determine the nature and extent of contamination and the associated risk to human health and the environment. While the subject report adequately demonstrates that a CERCLA release has occurred, it does not identify the nature and extent of contamination or the associated risk(s).**

Comment 2: **During the November 18-19, 2003, meeting at Fort McClellan, it was pointed out that the samples analyzed do not contain visible lead fragments. Thus, any data provided in this report underestimates the actual concentration of lead present in the environment.**

Comment 3: **EPA's review of the subject document is with the understanding that:**

A. The 3.3-acre berm south of the POW Training Area is undergoing separate investigation.
B. The impact areas for the ranges at Parcels 100Q and 101Q, although contiguous with the study area, are being investigated separately.

Comment 4: **It is not clear to EPA whether the creek flowing from the general direction of the impact zones is included in the subject investigation or another investigation. In either case:**

A. The creek is contaminated with lead, and requires further investigation.
B. It should be clearly stated as to which investigation includes the creek.

Comment 5: **EPA disagrees with the recommendation for "No Further Action" and "unrestricted land use." Rather, EPA recommends that these EPA comments be addressed and that an RI/FS and BRA be conducted.**

SPECIFIC COMMENTS

Comment 1. **A "No Further Action" conclusion for the ranges relied on splitting out the relatively clean firing line areas and distance to the target from the more contaminated impact zone to the southeast. An increasing gradient of contamination was seen in the concentrations in the 200 mg/kg range for samples GP-13 and GP-14 located in the southeastern portion of the range. The density and placement of samples in the study area ignored the expected contaminant gradient. That is, most of the samples concentrated on the center of the study area instead of sampling the southeastern border. Given the topography of the site, one would not have expected many bullets to land in the areas sampled. Thus, additional sampling is needed.**

Comment 2. **The highest concentration of lead in surface soil (404 mg/kg) was at Sample HR-100Q-GP02. The location of the highest detection in soil was one of the closest samples to the creek, which cuts through the site. Of three samples of the creek, two were in the 200 mg/kg concentration range. The lead levels in sediment are moderately high relative to levels at other ranges and are certainly high relative to the screening values. The geochemical analysis concluded that lead in sediment samples SW/SD01 and SW/SD03 was present at anomalously high levels relative to background. Soils near the creek were not sufficiently characterized to protect this potentially sensitive habitat. There was no ecological risk assessment of the sediment nor was there any ecological discussion specifically about sediment. Elevated lead levels were indicated to be sporadic, however there were only three samples taken of the creek, all within the study area. All exceeded the screening values. There were no upstream or downstream sediment data to delineate the extent of contamination. The degree of risk is unknown without this information.**

Comment 3. **The potential for ecological risk was dismissed due to future industrial land use. The conclusion, however, was unrestricted land use. EPA disagrees with this conclusion. Further sampling and risk evaluation of the creek is needed.**

Comment 4. **The sample with the highest soil lead concentration was located in the northeastern portion of the site. The sample location was not bounded to the north and east by samples having lower concentrations. The characterization of the site is inadequate toward the eastern boundary. Additional soils characterization is needed.**