Col. Gene McVay  
12622 Tennessee Circle  
Fort Smith, AR 72916-8208

Dear Col. McVay,

Thank you for contacting my office concerning your chemical contamination inquiry.

To help, I was in touch with the Military Department of Arkansas, and I received the enclosed letter in response. As you can see, a thorough inspection of the Fort Chaffee site was conducted by the Army Environmental Command and the results are included.

I appreciate the opportunity to be of assistance. Please be sure to visit our website at www.boozman.house.gov. I look forward to working with you again should you need my help in the future.

Sincerely,

John Boozman  
Member of Congress

JB: sg  
Enclosure
MEMORANDUM FOR RECORD

SUBJECT: Congressional Inquiry concerning Past Defoliant use at Fort Chaffee

1. The purpose of this memorandum is to provide guidance on historical use of defoliants and herbicides at Chaffee Maneuver Training Center (CMTC).

2. The Transition of CMTC from the Active Army to the AR ARNG required the investigation of a number of past Areas of Concern where various types of Training have occurred since WWII. All these areas were under Active Army control during their use and not a result of any Arkansas National Guard Actions. Since these sites were under Active Army control the Army Environmental Command (AEC) was responsible for the investigation and cleanup (if necessary) of any of these sites.

3. These sites included a number of Defoliant Spray Areas (DSA's) where a group of different herbicides were tested for the efficiency as use as a defoliant.

4. Numerous studies have been conducted in the past regarding the use of defoliants at CMTC with many being done as part of the BRAC action.

5. A report dated 7 October 1996 Final Environmental Baseline Survey identified 7 Defoliant Spray Areas (DSA) used during the 1960's as areas at which these herbicides were used. During later studies, the old hand drawn map could never be found identifying these 7 sites so one of the sites was deleted because it could not be confirmed.

6. A later Enhanced Preliminary Assessment / Site Investigation Report dated March 1999 performed by CH2M Hill identified 6 sites on CMTC with 2 located in the BRAC Excess Area north of highway 22 and were investigated by the BRAC Transition Team. The other 4 sites lie within the AR ARNG controlled area and were investigated by CH2M Hill as part of the BRAC transaction. These sites vary in size with DSA-1 being 720 acres, DSA-2 51 Acres DSA-3 143 acres and DSA-4 being 51 acres. The study recommended analytical soil laboratory testing to be conducted at the four sites to look for residual herbicide contamination.

7. A still later Preliminary Assessment / Site Inspection dated May 2003 was performed by Parsons Engineering to evaluate and sample the surface soil and shallow subsurface soils on the 4 sites. The results of the sampling indicated that although herbicides were detected on the sites at extremely low levels these were well below threshold limits and they concluded that there was no risk to human health or the environment. The report recommended that no further action be taken on these sites.

8. The latest report "The History of US DOD Programs for the Testing, Evaluation and Storage of Tactical Herbicides" Dated December 2006 conducted by A. L. Young Consulting for the Office of Under Secretary of Defense (OSUSD) confirms that Herbicides were used in the DSA's at least on one occasion. Although it was always suspected that herbicide orange was used it was never confirmed before this study. It described an event that happened between July and October 1967 at which 10 Drums of Herbicide Blue, 2 drums of Herbicide Orange and 6 gallons of Herbicide White were used on two 3 acre plots within one of the DSA's. It does not specify which DSA it was used in. The sites were monitored for effectiveness for a short period and then the tests were concluded.
9. One of the major components of herbicide orange is 2, 4 D and it is still in widespread use today. Herbicide Orange is a 50:50 mixture of 2, 4 D and 2, 4, 5 T. One dioxin TCDD is also associated with this defoliant as a contaminant of the mixture resulting from the manufacture of 2,4,5 T. The herbicide 2,4,5 T is no longer in use. The chemicals 2,4 D and 2,4,5 T have low soil persistence and biodegrade when released into the soils.

10. The contaminant of the mixture TCDD-Dioxin is a component of the mixture at between 2 and 30 parts per million. It is known to be a Human Carcinogen based off many studies involving humans. TCDD is very persistent in the environment, but can be slowly degraded by sunlight.

11. Discussions with the AEC and the AR ARNG environmental office center on whether there was enough sampling for the TCDD – Dioxin during the past studies in all the DSA’s. The AEC reviewed the results and had random samples tested for Dioxin with negative results. The A.L. Young study confirms that 2 drums of herbicide orange were used in what is believed to be DSA-1 based on staff interviews done in 2000. The AEC is currently reviewing the information of previous studies to determine if any more sampling needs to be conducted.

12. Several memos have been generated regarding this training event and a resulting congressional inquiry into these sites. Recommend this inquiry be forwarded to the Army Environmental Center for response regarding these sites.