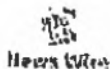


AGENT ORANGE TESTS AT FT. DRUM REPORTED



The Buffalo News (Buffalo, NY)
April 27, 1995 | Associated Press

The Army conducted extensive testing of Agent Orange at Fort Drum during the 1960s and 1970s, according to a Syracuse television station.

WSTM-TV, an NBC affiliate, reported Wednesday that it had obtained Army documents showing that developmental testing of the cancer-causing defoliant was done at the northern New York Army post from 1959 until 1978. Fort Drum is 90 miles north of here, near the Canadian border. It is the home of the 10,000-member 10th Mountain Division.

The documents surfaced in the case of (b) (6), an Army veteran stationed at Fort Drum in the late 1950s, WSTM reported.

(b) (6) of Albany recently won a \$100,000 settlement before the Veterans Appeals Board in Washington, D.C., which determined that he suffered from hairy-cell leukemia as a result of his exposure to chemicals, including Agent Orange.

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June 26, 1985

U.S. Army Toxic and Hazardous
Materials Agency
Building E4435
Aberdeen Proving Ground, Maryland 21010

Attn: AMXTH-AS-R/Mr. James T. Johnson, Jr.

Re: Sampling and Analysis for Dioxin in
the Main Impact Area of Fort
Drum, New York.
Contract No. DAAK11-84-D-0002

Gentlemen:

This report summarizes the sampling and dioxin analysis program conducted by Dames & Moore in the Main Impact Area of Fort Drum, New York. This effort was part of the overall exploratory phase contamination survey of Fort Drum for the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA), conducted under Contract No. DAAK11-84-D-0002.

Reports of Agent Orange spray testing in the Main Impact Area led USATHAMA to implement an extensive sampling program in the vicinity of suspected spray test areas. Samples were analyzed for dioxin, an environmentally persistent byproduct of Agent Orange production, using an accepted method developed by Region VII of the U.S. Environmental Protection Agency (EPA). No dioxin was detected in any of the samples. Detailed information on the herbicide spray testing at the site, delineation of suspected spray test areas, sampling program design and implementation, the chemical analysis method employed, results, and conclusions, are presented in the sections that follow.

BACKGROUND

It has been reported that from 1969 to 1978, 2,4-D at an application rate of 1.1 kilogram/hectare (kg/ha) was used to control vegetation along fences, and that 2,4,5-T at 2.2 kg/ha was used to control brush along Town Line Road and Russe

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Turnpike in the Main Impact Area of Fort Drum. According to interviews conducted during the installation records search, 2,4,5-T was also used on the range impact areas during the 1950's through the early 1970's to improve the line of vision from observation points to the target areas.

Reports and other information obtained more recently indicate that Agent Orange was tested as a defoliant in the Main Impact Area. Agent Orange is a combination of 2,4-D and 2,4,5-T. During the production of phenoxy herbicides, in particular 2,4,5-T, the feedstock 2,4,5-trichlorophenol (TCP) is utilized. Therefore, 2,3,7,8-TCDD (dioxin), a contaminant formed during the production of TCP, is of concern in the areas of Agent Orange usage. Whereas 2,4-D and 2,4,5-T tend to biodegrade rapidly, dioxin is environmentally persistent.

In June 1959, an undiluted, 1:1 mixture of 2,4-D and 2,4,5-T was tested over a four-square-mile area. The mixture was sprayed from H-31 helicopters equipped with a combination of two 55-gallon steel tanks, a gasoline engine driven pump, and a 23-foot spray boom with 24 jet nozzles. The spray was dispersed at heights of 25 to 75 feet above the treetops at an airspeed of 30 miles per hour.

Observers of the first 5 of 15 scheduled spraying missions estimated that spraying resulted in coverage of vegetation by herbicide in swaths of 50 to 300 feet wide. An attempt was made to average 5.5 to 6.0 pounds per acre coverage over a 4-square-mile area. Because the test site was an artillery impact area, access to it from the ground was not possible during the test. Thus, spray sampling grids, detailed observations of the site, and course markers for the helicopters could not be set up or performed. Therefore, it is not possible to determine either the degree of uniformity of spray coverage or the specific locations of spray testing.

Consequently, an attempt was made to delineate the suspected area of defoliant usage by comparison of pre- and post-spraying foliage conditions depicted on aerial photographs. Photographs of the impact areas north and south of the Indian River show large forested areas in 1958, prior to defoliant application. Recent (1981) photographs show that these same areas currently lack substantial vegetation in some spots. The apparently defoliated area, which is approximately 4 square miles in size, appears to be the spray test area discussed in past accounts.

FINDINGS AND CONCLUSION

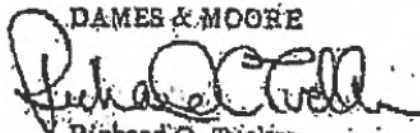
EEL reports that in none of the Fort Drum samples did the integrated ion currents for native 2,3,7,8-TCDD at m/z 257 exceed the criterion of 2.5 times the background noise. However, for all samples, the surrogate ion (m/z 328) exceeded 2.5 times noise and the internal standard ions (m/z 332 and 334) exceeded 10 times noise. Furthermore, all relative ion abundance, chromatographic, and recovery criteria were met, showing that all analyses were in control. No problems were encountered during the analysis of either set of samples, and all quality control criteria were met. Therefore, 2,3,7,8-TCDD was not detected in any of the samples. (See Appendix B for letter from EEL addressing the dioxin analyses performed.)

The question that commonly arises from laymen is: "Can we, therefore, say that there is no 2,3,7,8-TCDD in such samples reported as 'not detected'?" Scientifically, one can never make such a statement. One can only say that the compound was not detected and state the calculated detection limit of the method for the sample. Detection for the samples analyzed in this effort ranged from 0.010 µg/kg to 0.40 µg/kg (0.010 ppb to 0.40 ppb). The detection limits for all samples are tabulated in Table C-1, Appendix C.

We appreciate the opportunity to serve USATHAMA in this matter. Please do not hesitate to contact the undersigned if you have any questions.

Sincerely,

DAMES & MOORE



Richard C. Tucker
Partner-in-Charge



Stephen Lemont
Project Manager

RCT/SL:edt

Attachments

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records verify his presence at the base from May 1969 to December 1969, as a photographer.

He states that while photographing a training exercise during Advanced Individual Training (AIT) at a "Tiger Village" mock-up of a village in Vietnam, he repeatedly walked through an area that had been cleared using Agent Orange. He additionally alleges that Agent Orange was in widespread use around the base for weed control and landscaping, such as at the golf course. Finally, he states that Agent Orange (as well as Agents Blue and White) were present and being tested in the same building where he worked.

In a May 2010 response to VA inquiries, the Department of Defense (DoD) has certified that a "review of the DoD documentation does not show any use, testing or storage of tactical herbicides, such as Agent Orange, at any location in Alabama, to include Fort McClellan." The DoD also stated, however, that records would not reflect "small scale non-tactical herbicide applications" such as routine base maintenance activities like range management, brush clearing, or weed killing.

This certification excludes the possibility that Agent Orange was being tested in the same building where the Veteran worked; while other chemicals and compounds may have been used, it was not the required herbicide.

However, the DoD certification leaves open the possibility that herbicides may have been used in the manner described by the Veteran, to clear brush and weeds around the Tiger Village. Both the Veteran and his direct supervisor have stated that he was exposed to herbicides when photographing a training exercise. The basis for the supervisor's knowledge is unknown, but the Veteran relies upon reports made to him at the time by the officer in charge of the exercise, who told him Agent Orange had just been sprayed and they should stay out of certain areas.

That officer, whose specific identity cannot be determined, was in a position, with commensurate duties and responsibilities, to know what chemicals or substances were being used to maintain or prepare the training area. While it cannot be definitively ascertained whether Agent Orange was in fact the substance used in 1969 at Fort McClellan, all reasonable doubt must be resolved in favor of the Veteran. The Veteran's reports of the officer's statements are credible and competent evidence, and the officer was in the best position to identify the substance. This evidence of record establishes that the Veteran was at least as likely as not exposed to herbicides during service. This finding is limited to the specific facts and allegations of this case.

A number of treating doctors, both private and VA, have stated that the Veteran's currently diagnosed diabetes is related to that herbicide exposure. There is no opinion or evidence contrary to that conclusion, and so the presumption of service connection for type II diabetes mellitus in herbicide exposed Veterans is not rebutted.

Accordingly, service connection for type II diabetes mellitus is warranted.

B: Retinopathy

VA and private ophthalmological records reveal a current diagnosis of bilateral proliferative diabetic retinopathy, or PDR. All doctors relate this condition to diabetes mellitus; there is no contrary evidence.

As the preponderance of the evidence establishes that currently diagnosed PDR is causally related to now service connected diabetes, service connection for PDR on a secondary basis is warranted.

ORDER

Service connection for diabetes mellitus, type II, is granted.

Service connection for bilateral PDR is granted.

REMAND

The Veteran has alleged that he experiences numbness and tingling of both lower extremities, which he attributes to diabetic neuropathy. Although VA treatment records indicate a current diagnosis of diabetic neuropathy at several points, and VA

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