#### GAO

United States General Accounting Office Washington, DC 20548

Logistics and Communications Division

B-161507

**NOVEMBER 30, 1979** 

The Honorable Clifford L. Alexander, Jr. The Secretary of the Army; 20

Dear Mr. Secretary:

Subject: Survey of Reported Chemical and Biological Contamination at the Fort Greely Gerstle 9. 3440 2 River Test Center (LCD-80-25)

We have completed a survey on reported chemical and biological contamination at the Fort Greely Gerstle River Test Center. The enclosure provides details of our findings. The results of our survey show that the Army cannot certify that the land has been decontaminated and available for other uses because essential records which provide details on the tests are not available. The Army declared the land excess to its needs in 1972, and in January 1979 the land was removed from the excess status because the Army could not certify that the land was free of contamination. In view of the above situation and to insure the safety of both military and civilian personnel and the general public from accidental exposure, we are recommending that you direct the following actions:

- --Require tests to insure that all debris buried in the pits at Gerstle is in fact neutralized and that no contamination has spread from the confines of the pit areas. If contamination is found, direct all contaminated areas be exhumed and the contents decontaminated again.
- --Require that emergency treatment equipment be maintained at the Gerstle Test Center and that the Center's permanent personnel be trained in its use. The quantity of supplies should be sufficient to treat the maximum number of personnel which could be exposed to chemical or biological contamination at any time.

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- -- Insure that lands used for chemical and biological testing are not returned to the public domain without first having been decontaminated and a clearance certificate provided.
- --Determine which lands returned to the public domain were used for such tests and if these lands were not verified as being free of contamination, take all steps necessary to decontaminate the land and prepare the proper certification.
- -- Require that existent and future records pertaining to chemical and/or biological tests, as well as tests of other substances harmful to life, be kept permanently. Also, these records should be kept in a readily retrievable form.

As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommen- $\mathcal{A}$  dations to the House Committee on Government Operations and  $\mathcal{H}$  /50° co the Senate Committee on Governmental Affairs not later than 5660n 60 days after the date of the report and to the House and 13-4 Senate Committees on Appropriations with the agency's first (300 request for appropriations made more than 60 days after the date of the report.

Copies of this report are being sent to the Chairmen, 1500 House and Senate Committees on Appropriations and Armed Services, Senate Committee on Governmental Affairs, and House Committee on Government Operations. Copies are also being sent to the Director, Office of Management and Budget, and the Secretary of Defense.

Sincerely yours,

R. W. Gutmann

Director

ENCLOSURE

# FORT GREELY GERSTLE RIVER CHEMICAL AND BIOLOGICAL WARFARE TESTING

#### BACKGROUND

Chemical and biological warfare testing occurred on Alaskan land withdrawn by Public Land Order 910, August 7, 1953. This order withdrew 20,000 acres (later surveyed to be 20,800 acres) from the public domain. The area is known as the Gerstle River Test Center. Chemical and biological testing continued there until the late 1960s at which time the Center fell into disuse and remained in a caretaker status until 1978. Agents tested included chemical nerve agents VX and GB, HD (Mustard gas), and the biological agent Tularemia. Since the records were inadequate, we cannot say that these agents were the only ones tested. The Center, as well as other lands at Fort Greely, was declared excess in 1972 and scheduled for return to the public domain as soon as the land could be certified as free of contamination. This proved to be impossible and the land was removed from excess status in January 1979.

## PLANNED USE BY THE STATE OF ALASKA

An extension area to the Center, leased from the Department of the Interior's Bureau of Land Management on a renewable lease in 1964, was returned to the Bureau in 1972 after a cleanup effort in 1968. It is located between the present borders of Fort Greely and the Center, and the State of Alaska plans to use it as a bison range. The area does not have a clearance certificate even though it has been relinquished by the military.

## LACK OF DECONTAMINATION CERTIFICATION

The Army cannot certify that the Center is free from contamination in accordance with Army Regulation 405-90. The Bureau of Land Management and the General Services Administration refuse to accept land that has any contamination. The Commander of the Cold Regions Test Center (CRTC), landlord for the Center, believes the land to be virtually free from contamination. However, records of the testing periods from 1953 to 1964 are incomplete and subsequent records are poor, so there is a chance that contaminated areas may exist. The Commander will not sign a clearance certificate and claims that it would take a team of 10

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people with mine detectors from 128 to 129 years to certify the Center free of contamination in accordance with Army field manual instructions. This would cover only areas accessible on foot. The Center has bog conditions which cannot be surveyed on foot.

## Decontamination efforts

Three cleanup attempts were made at the Center and one was made in the 10-mile expansion area. Efforts to locate the sites where testing occurred were hampered by inadequate records. The Army searched available records and brought back to the Center personnel involved in testing in an effort to identify all sites.

## Chemical and Biological Warefare Cleanup Operations in Alaska

Operation	<u>Year</u>	Location
Expansion area	Sept. 1968	Between Ft. Greely and Gerstle
Blueberry Lake	May-Sept. 1969	Gerstle River Test Center
Cleanup Alaska	AugSept. 1970	Gerstle River Test Center and Expansion Area
HD cleanup	July-Aug. 1971	Gerstle River Test Center

#### Expansion area

The expansion area cleanup effort consolidated the debris from two test locations within the expansion area. The debris, which consisted of air sensors and other contaminated hardware items, was buried on Center land.

## Blueberry Lake

In the spring of 1967, over 200 projectiles and containers of various chemical agents sank to the bottom of a depression known as Blueberry Lake. The containers had been placed on the lake's ice during the winter for destruction. The destruction was delayed several times, and the projectiles sank to the bottom during the spring thaw.

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Transfer of personnel hampered the investigation of this incident. The officer in charge of the weapons placement at Blueberry Lake was rotated to a new assignment leaving only a noncommissioned officer (NCO) with onsite knowledge of the occurrence. The Army had no official records of the proposed destruction. In addition, the NCO was transferred in early 1968.

Rumors of the incident persisted until 1969 when the Chief of the Nuclear, Biological and Chemical and Special Projects Division of CRTC's predecessor, the U.S. Army Arctic Test Center, decided that the rumors had to be investigated, when weather permitted.

During Blueberry's cleanup, one container leaked a 105-mm. round containing a G agent and one NCO was contaminated. The NCO was treated with no reported lasting effects. The leaking container, as well as all the others, was neutralized and decontaminated. The containers were buried with neutralizing agents in a pit near the lake. Tests showed no water contamination.

## Cleanup Alaska

Cleanup Alaska was an effort of the CRTC and Deseret Test Center to consolidate all known test site waste into a single pit at the Center. The wastes from the extension area cleanup were dug up, decontaminated, and reburied. However, the Blueberry Lake pit was left intact.

## HD cleanup

The HD cleanup effort came about as the result of a letter claiming that 55 gallon drums of HD were buried near a command post on Center land. The investigation resulted in the discovery of two more test sites. One site had residue of HD testing, as well as three empty and burned 1-ton HD containers. The other site had no contamination. The waste from the test site was buried at the Blueberry Lake pit. There was no record of the agent HD ever being tested at Fort Greely nor were there records of the discovered test site burial pits.

In all, the decontamination and cleanup effort resulted in burying 2,000 tons of material in two pits at the Center. In August 1976, a Department of the Army team concluded,

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among other things, that contamination migration off the Gerstle test site was unlikely and that no biological or chemical contamination was present at the Center. The Commander of CRTC does not concur with these findings, and in a March 21, 1977, letter to senior Army authorities he stated

"Disparity in our interpretation of facts, discrepancies between the report (Installation Assessment of Gerstle River Test Site-Records Evaluation Report No. 105) and files maintained at CRTC, as well as the incompleteness of records for the periods of activity by Dugway Proving Ground (1954-1962) and Deseret Test Center (1962-1967) give rise to doubt about our collective understanding of the status, location and quantities of residues."

## PRESENT USE

The Commander of CRTC is not convinced that all contamination has been found because of the lack of records mentioned above. However, he is sure that trafficable areas are clear, and he is using the area for nonchemical/biological tests. He has had the area retained as an active part of the CRTC's test center.

## CONCLUSIONS

If canisters of a chemical agent should surface, decontamination gear and treatment are not available at the Center. However, they are available at Fort Greely, a 15-minute helicopter ride from the Center. Equipment at Fort Greely may be of little help to anyone exposed to chemical agents at the Center because, depending on how the agent enters the body, a person can die within 5 minutes.

No tests have been performed at the disposal sites to insure that they are completely decontaminated.

## ERRATA

To the recipients of the General Accounting Office report to the Secretary of the Army entitled "Survey of Reported Chemical and Biological Contamination at the Fort Greely Gerstle River Test Center" (LCD-80-25).

On page 3 of the enclosure, paragraph 3, line 1, the sentence should read "During Blueberry's cleanup, one container leaked and one NCO was contaminated."

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