

SITE SURVEY SUMMARY SHEET
FOR
DERP-FUDS SITE NO. JOSUT109800

SITE NAME: Yellow Jacket Target Area

LOCATION: The site is located in western Utah in Tooele County. Yellow Jacket Target Area is 3 1/2 miles south of the border of DPG, 4 1/2 miles east of Wendover Bombing and Gunnery Range and on the west most side of the South Ballistic Grid.

SITE HISTORY: Dugway Proving Ground (DPG) was established in 1942 to develop and test chemical weapons and biological defense systems. Open air testing of chemical agents was performed at DPG until 1969, when all such activities were suspended. Since then, only chemical simulants have been tested in the open air.

In 1945 a large number of tests were conducted with persistent and non-persistent gases and flame-type munitions against pillbox and bunker-type fortifications. One special project at DPG was Project Sphinx. The object of the project was to determine the best material, either available or under development, for reducing Japanese caves and underground fortifications. Also the best means of employment of that material needed to be determined. Another object of the tests was to compare the effectiveness of various Chemical Warfare Service (CWS) materials for reducing caves and underground fortifications.

Extensive tests were conducted at DPG to determine the effectiveness of inflammable vapor, namely butane and gasoline in neutralizing pillboxes and bunker-type fortifications. Included in the program were tests employing toxic agents (CG, CK, AC, and H), smoke (HC, WP, PWP, and EWP), and flame munitions (butane and gasoline). The agents were tested in bombs, mortar and artillery shells, rockets, and droppable light case tanks.

A total of ten mine shafts and tunnels located in one canyon outside the military reservation in the Dugway Mountain Range constitute the Yellow Jacket Target Area. Five of the mines lie within one artillery square on a slope approximately 200 feet high. This area is called the Central Area. The remaining mines lie on adjacent slopes and are somewhat more isolated.

The forms of the mines vary from sloped or horizontal tunnels with single openings to complete chambers with three openings. The mines were used without modifications except to place gas curtains across some of the openings.

The Yellow Jacket Target Area was considered a target area wherein the individual cave openings were not known and the agents were dispersed uniformly over the area.

Some of the tests conducted at the Yellow Jacket Ranges consisted of the dropping of tanks filled with a 4-6% Napalm-gasoline mixture; the release of 5000 lbs of aviation gasoline and 5000 lbs of butane.

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SITE VISIT 1: A site visit was conducted on 1-2 March 1993 by Larry Bergmooser and Greg Van Dam, CESPCK-ED-E. All information is based on available information and interviews.

An actual visit on site was not possible due to snow cover. Of the people interviewed, none had any helpful information concerning the Yellow Jacket Target Area. To the best of the knowledge of those interviewed, no ordnance has been recovered in the area.

Records indicate that chemical agents were used against cave type fortifications believed to be located in the Yellow Jacket Ranges. Tests employing toxic agents, smoke and flame munitions were used. The agents were tested in bombs, mortar and artillery shells, rockets and droppable light case tanks.

SITE VISIT 2: A site visit was conducted on 11 May 1993 by Natalie Sterling, CESPCK-ED-E. The site was viewed from a helicopter because the winds were too high to land and walk the area. Carl Jorgenson, Environmental, DPG, informed those on board of the areas where the mines were located. He pointed out mines one through ten. From the air, it was impossible to see if there was any sign of debris on the ground. Carl and a few others had walked the site a few weeks prior to the site visit and found some debris in the area of the mines.

Upon talking with Carl at a later date, he stated he had found a 100 lb bomb empty in the area of the mines.

CATEGORY OF HAZARD: OEW

PROJECT DESCRIPTION:

- a. OEW. Refer this project to CEHND for evaluation and determination of further action.
- b. Recommend Airway to Ground Penetrating Radar (AGPR)

AVAILABLE STUDIES AND REPORTS: None

PA POC: Ms. Natalie Sterling, CESPCK-ED-EB, (916) 557-7227.

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
FORMERLY USED DEFENSE SITES

FINDINGS AND DETERMINATION OF ELIGIBILITY

YELLOW JACKET TARGET AREA
TOOELE COUNTY, UTAH
SITE NO. J08UT109800

FINDINGS OF FACT

1. In June of 1945, Dugway Proving Ground (DPG) conducted tests using persistent and non-persistent gases and flame-type munitions in the Yellow Jacket Target Area. The target area is approximately 17 acres in size and is located approximately 3 1/2 miles south of the border of DPG, 4 1/2 miles east of Wendover Bombing and Gunnery Range, and on the west most side of the South Ballistic Grid, all located in Tooele County.
2. There is no documentation that DPG leased the land from the Department of Interior, Bureau of Land Management (BLM) but there is a demonstrated and documented presence of testing of chemical warfare materials by the DOD.
3. Open air testing of chemical agents was performed at DPG until 1969, when all such activities were suspended. Since then, only chemical simulants have been tested in the open air.

DETERMINATION

Based on the foregoing findings of fact, the Yellow Jacket Target Area, Dugway Proving Grounds, has been determined to be formerly used by the Department of Defense (DOD). Therefore, it is eligible for the Defense Environmental Restoration Program for Formerly Used Defense Sites, established under 10 U.S.C. 2710 et seq.

Date

Milton Hunter
Brigadier General, U.S. Army
Commanding

PROJECT SUMMARY SHEET
FOR
DERP-FUDS OEW PROJECT NO. J08UT109801
YELLOW JACKET RANGES

PROJECT DESCRIPTION: Currently, the Yellow Jacket Target Area is open to the public. The area is occasionally used for recreational purposes.

Since the former target area is open for public use, it is recommended that members of Huntsville Division visit the site to make their assessment whether the site presents a risk to the public. Based on the results of the Huntsville Division inspection, the risk assessment code should be revised and the project should be added to the current workplan for further investigation.

PROJECT ELIGIBILITY: The target area was used and disposed of by the Department of Defense.

POLICY CONSIDERATION: The site today represents a safety concern for both the local government and Department of Interior.

PROPOSED PROJECT: Refer this site to CEHND for evaluation and determination of further action.

RISK ASSESSMENT CODE: Attached.

PA POC: Ms. Natalie Sterling, CESP-K-ED-EB, 916/557-7227.