

Herbicide use in Thailand 1961 to 1976

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The following is taken from a collection of Official Documents, Eye witness accounts, Veterans law & Regulations, and the writings of Dr. Alvin L. Young.

(1) Herbicides (commonly but incorrectly referred to as Agent Orange)

To get a clear picture of what herbicides are within the time frame of the Vietnam War era.

A: 38CFR 3.307 (a) (b) (i) defines herbicide agents with contaminants of TCDD (dioxins), Cacodylic Acid, and Picloram in the herbicides.

B: National Security Decision Memorandum 78 of Aug. 11, 1970 states on page 2, Paragraph 6, *“Chemical Herbicides are considered as those chemical compounds which are used domestically within the United States in agriculture for weed control and similar purposes”*.

C: In Alvin L. Young report to Office of the Under Secretary of Defense Titled “The History of the U.S. Department of Defense for the Testing, Evaluation, and Storage of Tactical Herbicides” dated Dec. 2006, contract number DAAD19-02-D-0001, he defines two (2) categories of herbicides, Tactical and Commercial

(a) Tactical Herbicides were herbicides developed specially by the Department of Defense to be used in “Combat Operations”.

The Tactical herbicides were identified by a painted stripe around the center of the drum. The word Tactical means “using or being weapons or forces employed at the battlefield”.

This is a partial list of Tactical Herbicides with contaminants:

Blue	Cocadylic Acid
Green	Dioxin

Orange	Dioxin
Pink	Dioxin
Purple	Dioxin
White	Picloram

NOTE:

Have you ever heard of the Geneva Convention that deals with Chemical Warfare? When Alvin Young, Ph D in his 2006 report, used the term Tactical Herbicides, is he admitting the U.S. used chemical warfare during the Vietnam War era?

(b) Commercial Herbicides

In Department of Defense directives 5154.12 and 4150.7, are those herbicides approved by the Armed Forces Pest Management Board and meet the USDA's regulatory requirements.

The approval authority for use of commercial herbicides at Thailand bases was the base Civil Engineer.

This is a partial list of commercial herbicides with contaminants:

Silvex contained 2,4,5T	Dioxin
2,4,5TS	Dioxin
Brush Killer contained 2,4D & 2,4,5T	Dioxin
Tordon 101	Picloram

Note:

All herbicides that contained 2,4,5T was contaminated with dioxins. In the mid 1980's the EPA banned the manufacture or use of 2,4,5T because it could not be manufactured without dioxin.

- (2)** Official Government Documents, Eye Witness Statements, and testimony before Veterans' BVA provide information that herbicides were authorized for use and were used on all U.S. Installations in Thailand and were only restricted to within the perimeter.

(a) USMACTHAI Regulation 210-10 states

Purpose: To establish policies for methods of foliage and vegetation control, and to define procedures to obtain approval for the use of soil sterilants by U.S. Military in Thailand.

General: Foliage at the perimeter and within the confines of installations must be controlled to enforce Security and reduce Fire Hazards.

Applicability: All U.S. Armed Forces in Thailand.

(b) Joint Message Form DD 173 from Col. Curto, COMUSMACTHAI Bangkok, Thailand to BG Taylor, CG Task Force Delta, Nam Phong RTAFB, Thailand.

Provide procedures for obtaining approval of herbicide use.

It states *“Herbicides should be applied only within the confines of the base”*.

(c) Board of Veterans’ Appeals Citation 1139851, Docket No. 08-18 542.

In his statement at his BVA hearing, the Veteran testified that he served as a pavement specialist and landscaper at Udorn Air Force Base, Thailand. His military duties required him to perform landscaping and defoliation duties around the Flight Line, Barracks, and Perimeter of Udorn Air Force Base during his active duty period.

The Board finds the Veterans’ Testimony credible.

(d) Affidavit of Richard M. Kilgore, PLLC

He serves at Nam Phong RTAFB, Thailand as a Steel Worker Petty Officer 2nd Class with USN MCB5 (Seabees).

He states, *“Not long after his arrival he found 3 or 4 barrels of actual Agent Orange (a Herbicide) stored at the base. Him and several other Seabee’s mixed and sprayed the herbicide to clear the jungle for construction”*. He also stated *“He witnessed Aerial Spraying of Nam Phong RTAFB, Thailand with the purpose of clearing the rest of the jungle for construction of facilities for the arriving Marines”*.

(e) Buddy Statement from Harmon Snipes U.S. Army Special Forces, attached to CIA encampment that shared a portion of the perimeter fence with Nam Phong RTAFB, Thailand. He Stated, *“he observed spraying of perimeter multiple times from a truck mounted sprayer that killed all vegetation”*

NOTE: These documents and eye witness statements prove herbicides could be and were used within the perimeter, NOT JUST ON THE PERIMETER, of all U.S. Military Installations in Thailand.

The above information proves the Veterans Administration’s limit of duty on or near the perimeter for exposure to herbicides is no longer valid.

Dioxin Information: Environmental contamination from Dioxin, 2,3,7,8-TCDD is long lasting and is known as the deadliest chemical known to man. The EPA has set the safe exposure rate as .7 picograms per kilogram of body weight. 0.7 picograms = .000 000 000 000 7 grams. So if a human weighed 82Kg (180Lb) the safe exposure would be .000 000 574 grams or 574 nanograms. Herbicide mixture ratio is 1 to 10 but was actually mixed 50/50. Herbicides were applied at a rate of 50 to 100 gallon per acre by ground based equipment. The dioxin applied per acre would be between .038 and .378 grams, or 38000000 to 378000000 nanograms of dioxin per acre per application depending on mixing ratio and application rate. This is based on 2 Parts per million dioxin content. These numbers indicate enough dioxin on one (1) acre to contaminate beyond the safe exposure limit of 66,000 to 658,000 people Herbicides were applied almost monthly to keep down the Jungle Growth. Repeated spraying would cause accumulation of dioxin as described below.

The term used to describe how long dioxin last is referred to as its Half-life. In EPA 2000 the half-life of dioxin is about 7 years in humans, in subsurface of soil 25 to 100 years and on the surface of soil 9 to 15 years. So herbicides containing dioxins sprayed on an area of soil will remain for over 100 years depending on conditions.

This Article does not address the other toxin in Herbicides described in 38 CFR as Picloram and Cocadylic acid.

The above information proves that the Veterans Administration's assumption that dioxins in herbicides are short lived is incorrect. If there is any doubt left, the U.S. is currently decontaminating former U.S. Military bases in Vietnam 40+ years since the end of the Vietnam War. Also for further reference to dioxin contamination and the problems created, look at Love Canal, New York; Times Beach, Missouri; and Valley of Drums, Kentucky.

If our Government can spend Billions to clean up behind Companies that contaminate areas in the United States and the Bases in Vietnam, why does our government not compensate all of the Veterans exposed to dioxin in contaminated Herbicides.

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