



---

## Uploaded to VFC Website

▶▶ **November 2012** ◀◀

---

This Document has been provided to you courtesy of Veterans-For-Change!

Feel free to pass to any veteran who might be able to use this information!

For thousands more files like this and hundreds of links to useful information, and hundreds of "Frequently Asked Questions, please go to:

[Veterans-For-Change](#)

---

*Veterans-For-Change is a 501(c)(3) Non-Profit Corporation  
Tax ID #27-3820181*

***If Veteran's don't help Veteran's, who will?***

We appreciate all donations to continue to provide information and services to Veterans and their families.

[https://www.paypal.com/cgi-bin/webscr?cmd=\\_s-xclick&hosted\\_button\\_id=WGT2M5UTB9A78](https://www.paypal.com/cgi-bin/webscr?cmd=_s-xclick&hosted_button_id=WGT2M5UTB9A78)

---

**Note:**

VFC is not liable for source information in this document, it is merely provided as a courtesy to our members.



**Item ID Number** 05591

**Not Scanned**

**Author** Young, Alvin L.

**Corporate Author**

**Report/Article Title** Outline Report of the Agent Orange Working Group  
Science Panel Subcommittee on Exposure, November  
1982

**Journal/Book Title**

**Year** 0000

**Month/Day**

**Color**

**Number of Images** 0

**Description Notes**

Outline Report of the  
Agent Orange Working Group  
Science Panel  
Subcommittee on Exposure  
Alvin L. Young  
VA/AOPO  
November 1982

Factors that must be considered in the development of an exposure index model include nature of the chemical and target, time after application of the herbicide and distance from application site.

I. Factors that Influenced Exposure to Herbicide:

- ° Herbicide Formulation
  - Chemical/Physical Characteristics
  - Solubility
  - Vapor Pressures
- ° Dissemination of Herbicides
  - Application Parameters
  - Target Vegetation
- ° Route of Exposure
  - Dermal
  - Inhalation
  - Ingestion
- ° Environmental Fate
  - In Air
  - On Vegetation
  - In Soil
  - In Water

II. Dissemination System

1. RANCH HAND KC 123/A/A45Y-1 Dispenser Internal Defoliant
2. UH-1B/D Helicopter Spray System (Agrinautics)
3. Buffalo Turbines

4. Power-Driven Decontamination Apparatus (PDDA)
5. Back-Pack Sprayers ( 2 and 5 gallons)
6. "Jerry-Rigged" or Field Expedient Devices.

### III. Factors described by Weighted Systems

#### A. Toxicity of Herbicide

#### B. Fate of TCDD

Location of Mission  
 Jungle  
 Mangrove  
 Crop  
 Other

#### C. Type of Mission

RANCH HAND  
 Perimeter  
 Herbicide Abort occurrence

#### D. Time After Exposure

Days

- ° within 1
- ° within 2
- ° within 3

#### E. Distance from Exposure Type (Application Site)

- ° within 0.5 km
- ° within 1.0 km
- ° within 1.5 km
- ° within 2.0 km

### IV. Assignments of Weights

° Toxicity of Herbicides		Weight Score
Orange	600 mg/kg	5
Blue	2600 mg/kg	2
White	3100 mg/kg	1

° Location of Mission

Defoliation

Jungle (Heavy Canopy)	10% Penetration	1
Mangrove (Light Canopy)	32%	3
Crop/Abort Missions	100%	10
Perimeter Applications	70%	7

Time/Distance Matrix\*

Time Days	Distance (km)			
	<0.5	1.0	1.5	2.0
1	70	15	10	5
2	35	8	5	3
3	18	4	3	1

↑                      ↑  
Perimeter  
Application

} RANCH HAND  
Application

\* Values in Time/Distance matrix established in percent of herbicide particles falling within specified distance from height of release (RH Mission) and impact of environmental degradation or binding over specified time intervals.