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*If Veterans don't help Veterans, who will?*

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Dear Mr. Sanderson:

Thank you very much for the important information and clarifications that you provided. In relation to Toxic Chemicals/Solvents other than TCE, I'm very well aware of them. In my research, the solvent that you mention, as well as others, are included in chapters 7 and 8 of my document, a brief summary of which I'm sending you enclosed.

This message is also a sort of goodbye. Because the permanent harassment and abuse to which I'm being subject by the executive management of the university for two reasons:

=1st= for giving my technical opinion about the Cancer Research Center (that if it continued with the same technical incompetence and fiscal mismanagement, Guam was going.... and is going.... to lose the first and only opportunity to be able to deal with the epidemic proportions of cancer in its population), and

=2nd= that the type and concentrations of Toxic Chemicals in Guam constitute a medical emergency. That it is imperative to inform the community and work towards the control of this problem. That this is not only a professional and moral obligation, but it's the Law.... and I'm being harassed for honoring the Law.

I'm close to finish the research on Toxic Chemicals in Guam and its association with cancer, diabetes, renal insufficiency, congenital defects, etc. Because the document is so extensive (more than 2,400 pages, and 7,000 references), a scientific publishing company offer to publish it as a book. Even though, for two years I did all the humanly possible to survive the vicious harassment to which I'm subject, at this point is almost impossible to keep working.....

All the best,  
Dr. Szyfres

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-Original Message-

From: Ruben Sanderson=Date: 10/18/07

To: Luis Szyfres, MD, MPH=Subject: Guam Contamination

Hi Professor,

You missed some things with the VOCs especially the TCE. When I was on Guam, you could taste, see, and smell a solvent in the water on NCS Guam (Finegayan). It seemed to be worse after the return and launch of the B52 sorties. TCE isn't only a degreaser. It was and may still be used to clean the aircraft after each flight. This is how it was done in the 1960s. A B52 goes to Vietnam and returns. Upon return it is taken to it's bunker. This aircraft is then washed down with a TCE and water mixture. The plane is then readied for it's next sortie.

After leaving the revetment (bunker) the bunker itself is TCE'd. Every aircraft is done in this manner. Every revetment is tied into the drainage system which in turn was tied into dummy wells or sinkholes or the TCE is just run out onto the ground. Andersen AFB was the largest fully contained attack base in the world during Viet Nam. The B52 flights during this period were over one hundred thousand. Add in all the other aircraft and there was certainly well over a million flights in and out of Andersen during Viet Nam. That's a lot of TCE. It isn't the only solvent used.

Toulene is another. I contacted ATSDR several years ago about the TCE. In order for a person to taste, see or smell TCE in water it would have to be about 1,000,000ppb. Many veterans that have contacted me through the years remember the solvent tasting water. Others have told me how it was used. All military installations use this stuff to a certain extent. You had 3 bases that sit atop the NGL. 2 of these bases, Andersen and the NAS, using the solvent extensively and dumping into the environment. I might add that the most contaminated bases the military has are air force bases and naval air stations. The third base that was sitting atop the aquifer was the communications station and that too uses a lot of solvents like TCE for all the cleaning of communication equipment like teletypes. TCE used in the 60s is probably still in your aquifer. It most certainly is in the soil. Your aquifer is essentially contaminated for all time with many of the toxics dumped by the military. The problem at Lejeune is minor compared to Guam.

Van Sanderson (U.S. Veteran stationed in Guam\*)

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BRIEF SUMMARIES OF CHAPTERS 17 and 18 OF THE BOOK:

"GUAM, THE LAND OF THE ROSARIES":

STUDY OF THE CONTAMINATION OF GUAM'S WATER, SOIL, AIR, AND FOOD  
WITH TOXIC CHEMICALS KNOWN TO REPRESENT A SERIOUS HEALTH  
RISK TO THE HUMAN POPULATION, ANIMALS, AND PLANTS.

by  
Luis Szyfres, MD, MPH

**17. VOLATILE ORGANIC COMPOUND (VOC): B. BTEX**  
(benzene, toluene, ethylbenzene, and xylenes)

Federal Agency for Toxic Substances & Disease Registry (ATSDR)

BTEX: sites, dates, and concentrations/comparison values (CVs).

Groundwater from Downgradient Wells of Each Site

**GUAM, YIGO – (SITE NO. 26)**

Fire Training Area No.2. Main Base: used between 1958 and 1988

BTEX: concentrations "above" CVs---- up to: 7,200 ppb

**EXPOSURE**

- a) Benzene, toluene, ethylbenzene, and xylenes (BTEX) frequently occur together at hazardous waste sites. The four chemicals are volatile and have solvent properties.
- b) BTEX compounds are among the most acutely toxic and the most mobile in soil and groundwater, with the potential to move through soil and contaminate ground water, and their vapors are highly flammable and explosive.
- c) BTEX compounds can pose a drinking water hazard when they accumulate in ground water.

## **HEALTH EFFECTS**

BTEX compounds are well absorbed, distribute to lipid-rich and vascular tissues such as the brain, bone marrow, and body fat due to their lipophilicity.

A. Chronic potential hazards include harmful effects to the:

Liver Kidneys Heart Lungs Nervous System, including neurological impairment Anemia, with subsequent manifestation of Acute Myelogenous Leukemia.

B. Acute hazards include:

Potential acute toxicity to aquatic life in the water column, as well as inhalation hazards.

### **18. Volatile Organic Compounds( VOCs) & Semi Volatile**

Organic Compounds (SVOCs):

C. Not Specified

Substances containing carbon and different proportions of other elements such chlorine, bromine or sulfur; these substances easily become vapors or gases. A significant number of the VOCs are commonly used as solvents (e.g., paint thinners, lacquer thinner, degreasers, dry cleaning fluids).

Federal Agency for Toxic Substances & Disease Registry (ATSDR)

SVOCs: sites, dates, and concentrations/comparison values (CVs).

A. Shallow Subsurface Soil

#### **GUAM, YIGO – (SITE NO. 35)**

Waste Pile No.1-Operable Unit. Main Base.

Several thousand deteriorated drums of asphaltic tar from unknown dates in this site.

SVOCs: concentrations “above” CVs ---- up to 0.27 ppm

#### **GUAM, YIGO – (SITE NO. 29)**

Waste Pile No. 2 (formerly known as Chemical Storage Area 2)-Operable Unit. Main Base:

Deteriorating drums of asphaltic tar .Dates of operation unknown.

#### **GUAM, MARBO – (SITE NO. 22)**

Waste Pile No.6 (formerly Landfill No. 27)-Operable Unit. MARBO Annex: contains construction debris.

Dates of operation are unknown for this site

VOCs: concentrations “above” CVs.

SVOCs: concentrations “above” CVs ---- up to 0.26 ppm

**GUAM, NORTHWEST FIELD – (SITE NO. 31)**

Chemical Storage Area No.4. Operable Unit. Northwest Field: waste oils and solvents stored at this site.

VOCs: concentrations “above” CVs ---- up to 1 ppm

**GUAM, YIGO – (SITE NO. 26)**

Fire Training Area No.2. Main Base: used between 1958 and 1988.

VOCs: concentrations “above” CVs ---- up to 109 ppm

**GUAM, YIGO – (SITE NO. 26)**

Fire Training Area No.2-Operable Unit. Main Base: used between 1958 and 1988.

SVOCs: concentrations “above” CVs ---- up to 6.8 ppm

**GUAM, HARMON - (SITE NO. 19)**

Landfill No.24-Operable Unit. Harmon: holds sanitary trash and other types of debris from the 1950s.

SVOCs: concentrations “above” CVs ---- up to 230 ppm

**GUAM, NORTHWEST FIELD – (SITE NO. 21)**

Landfill No.26-Operable Unit. Northwest Field: filled with sanitary trash & construction debris from 1966.

SVOCs: concentrations “above” CVs ---- up to 42 ppm

**GUAM, YIGO – (SITE NO. 8)**

Landfill No.10/Landfill No.11/Landfill No.12-Operable Units. Main Base.LF-10: was used from the early to mid-1950s, to dispose of asphalt wastes, scrap metals, empty 55-gallon drums, sanitary wastes, construction debris, occasional waste POL, and solvents. LF-11: was used in the early 1950s as a disposal area for asphaltic material, empty 55-gallon drums, and construction debris. LF-12: was used in the late 1950s to dispose of sanitary trash and small quantities of asphaltic wastes.

SVOCs: concentrations “above” CVs ---- up to 50 ppm

B. Groundwater from Downgradient Wells of Each Site:

**GUAM, NORTHWEST FIELD – (SITE NO. 30)**

Chemical Storage Area 3 (now known as Waste Pile No.4)-Operable Unit. Northwest Field: used from 1950 to 1970 to dispose of unexploded ordinance, waste oils and solvents.

VOCs: concentrations “above” EPA's Maximum Contaminant Levels (MCLs)