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Barzilay.

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Mr. Bob Barzilay
New York Times
229 West 43rd Street
New York, NY 10036

Dear Mr. Barzilay,

The undersigned, who have been closely involved in the study of the effects of chemical defoliants in Vietnam and of Agent Orange in particular, take exception to the editorial "The Truth about Agent Orange" in the New York Times of August 13.

We agree that it is uncertain as to whether there are any demonstrable health effects on humans as the result of exposure to the dioxin contaminant of the Agent Orange used in Vietnam. We are all too well aware of the difficulties in investigations such as these, but to state that it has been clearly demonstrated that there are no health effects is false.

It is agreed that the total amount of dioxin sprayed was probably at least 170 kg.--the amount given in the editorial--but we are unaware of any scientific evidence that 95% of this stayed, even initially, in the forest canopy. In any case, this figure is totally irrelevant, since, at least whenever an effective defoliation had been achieved, most of the dioxin would soon have reached the ground.

The human significance of the food chain concentration of dioxin has not been proven, but dioxin has been shown to be present in fish and in human milk two years after the cessation of spraying. Of course, the possibility of a prolonged exposure through food is more likely to be signficant among the Vietnamese than among U.S. soldiers. Nonetheless, as reported this year by Professor Michael Gross of the University of Nebraska, dioxin was detectable in the body fat of some U.S. Vietnam veterans sampled many years after the cessation of spraying.

To say that "complaints about Agent Orange didn't begin until six years after spraying ceased" is false. The late Dr. Ton That Tung was impressed by apparent increases in liver cancer and congenital anomalies--an increase which he ascribed to the effect of herbicides --by the middle 1960's, several years before spraying ceased. It was partly in response to such concerns that the American Association for the Advancement of

Science Herbicide Assessment Commission, of which two of the undersigned were the active medical members, was sent in 1970 to explore the medical and economic effects of herbicide use in Vietnam.

Studies of the unfavorable outcomes of pregnancy (miscarriage, congenital anomalies) among North Vietnamese women whose husbands served in the South and were therefore variably exposed to Agent Orange do show statistically valid increases in comparison to those found in women whose husbands stayed in the North. Contrary to the opinion given in the editorial, an increase in congenital anomalies "widespread throughout the population" may be just as significant as an increase in a rare anomaly. Not every toxin manifests itself in such a sensational way as phocomelia.

The study of the pilots who did the spraying (Operation Ranch Hand) was not entirely negative and did, in fact, show some potentially significant changes in health problems among them. It would now seem in order to determine if any such problems can be correlated with dioxin residues in the body fat.

It may well be that no health effects resulting from exposure to dioxin will in fact ever be indubitably demonstrated among American veterans, but we believe that the present evidence does not justify the editorial conclusion that there is "no reason to suppose that veterans...have any symptoms for which dioxin might be the explanation."

Yours sincerely,

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