

DIOXIN

ANNOUNCEMENT

Monsanto

Monsanto Company issued the following statement in response to an article in the St. Louis Post-Dispatch alleging that the company disregarded warnings about dioxin during the time it manufactured Agent Orange for use as a defoliant during the Vietnam War:

A July 7 Post-Dispatch story about the company's production of the herbicide 2,4,5-T was erroneous in an early edition and misleading in later editions.

The implication in the story that levels of more than 1 ppm in the herbicide are unsafe was unsubstantiated in the 1960s, and it remains so today.

There was and is no credible scientific or medical evidence supporting claims of long-term human health effects other than the skin condition, chloracne. Dioxin is probably the most tested chemical substance in the world, and there is still no evidence that it has caused the long-term health problems claimed by some Vietnam Veterans. The most recent example of this is the U.S. Air Force Ranch Hand Study, released only a few days ago, which shows that the rate of deaths for U.S. Air Force personnel who sprayed Agent Orange in Vietnam has not been higher than that for a comparative group of veterans who were not involved in aerial spraying missions. Those men, according to the Air Force, were the most heavily herbicide-exposed group of U.S. military personnel in Southeast Asia.

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The story also stated that "Monsanto's product contained up to 50 parts per million of dioxin." While there were a few times that Monsanto's 2,4,5-T may have contained dioxin levels in the 40 ppm range, those levels represented exceptions. Overall, the levels averaged much lower, and in fact, after 1965, steadily declined on a year-to-year basis.

During the time Monsanto manufactured the herbicide, our process was under continuing review, and the company took appropriate precautions to protect its employees who worked around the 2,4,5-T process at its Nitro, W. Va., plant. This workforce is probably the most medically studied employee group in the world. Three separate health studies have been completed and they all concluded that, other than chloracne, no long term health problems that could be associated with exposure to dioxin have ever been found.

Agent Orange is a highly charged, emotional issue which is being further complicated by the premature and/or unauthorized release of documents which can be unfairly interpreted out of context. We are confident that when the case is considered in the courts, our position will be upheld.

Corporate Public Relations

St. Louis
July 8, 1983

106 AGENT ORANGE

December 9, 1983

AGENT ORANGE UPDATE

Dow filed a brief on December 1 in federal court in Brooklyn which urges in part that apportionment of liability in the pending Agent Orange trial be based on the dioxin content of each manufacturer's product.

Included in Dow's brief is a chart which purports to show that Monsanto is responsible for 74.8 percent of the total dioxin shipped to Vietnam versus only 1.3 percent for Dow.

This action will be reported in the Dec. 14 issue of Chemical Week magazine. Our response follows:

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"Monsanto disputes the factual accuracy of this information. These are merely assumptions based on inadequate data. The dioxin content of each supplier's product will be a matter to be litigated at the trial. This notwithstanding, Dow's argument is a classic case of putting the cart before the horse.

Monsanto, Dow and indeed all the other producers of Agent Orange have consistently held that Vietnam veterans were not exposed to harmful levels of dioxin, period. There is no scientifically credible evidence to show that the levels of dioxin in any supplier's product caused any harm to anyone.

The overwhelming evidence, gathered to date, does show that the health status of Vietnam veterans is at least as good as, if not better than, any comparative group with no exposure history. Veterans are not suffering excessive rates of cancer or any other chronic illness. Their children are not suffering from excessive birth defects.

The hallmark or first visible symptom of human exposure to dioxin is the skin condition, chloracne. Medical examinations of Vietnam veterans, done by the Veterans' Administration to date, have failed to confirm a single case of chloracne.

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These findings -- namely, the absence of any causal link between dioxin and the health effects alleged by some Vietnam veterans -- are consistent with the results of a scientific evaluation of the probable toxic effects of the dioxin in Agent Orange, conducted by Kingsley M. Stevens of the Department of Medicine, State University of New York at Stony Brook.

In his paper, 'Agent Orange Toxicity: A Quantitative Perspective,' published in the scientific journal, Human Toxicol, (1981), 1,31-39, Dr. Stevens concludes that 'the dioxin sprayed with Agent Orange in Vietnam cannot have caused systemic illnesses in Vietnam veterans or birth defects in their children.'

Dr. Stevens based this conclusion on first calculating the minimum toxic dose of dioxin for man from the monkey and human data; he then calculated the amount of dioxin which man takes in from his environment; the average concentration of dioxin present in Vietnam immediately after spraying Agent Orange and, finally, the amount (internal body concentration) the soldier, directly sprayed, would attain. He calculated this amount to be 1/1750 of the minimum toxic dose. Dr. Stevens further noted that soldiers moving through previously sprayed areas would ingest much less dioxin.

'Since it would take about five years of daily, close contact with Agent Orange to reach toxic levels of dioxin,' he stated, 'claims that illnesses in Vietnamese...and Americans...were due to Agent Orange are without merit.'

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