

Monsanto

CONFIDENTIAL

FROM
(NAME - LOCATION - PHONE)

John J. Spano -- G4NH -- 8654

: April 3, 1979 -

SUBJECT : Q&A ON "AGENT ORANGE" DIOXIN - KRUMMRICH

REFERENCE :

TO : P. O. DeGarmo -- A2SA
H. M. Keating -- G4WA
F. C. Meyer -- A2SA
P. S. Park -- E2NE

cc. D. R. Bishop -- A3NB

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R. L. Neunreiter

J. R. Thurrott

Attached is a preliminary Q&A on "Agent Orange" dioxin at the W. G. Krummrich Plant. Questions have been raised by employees regarding exposure. The final version of our Q&A listing would be used to respond to individual questions from employees and to answer press queries.

I would appreciate any comments you may have as soon as possible.

Thanks.

John J. Spano

JJS:pa
Attachment

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PREPAREDNESS Q&A RE "AGENT ORANGE" DIOXIN AT KRUMMRICH

- Q. When did you make "Agent Orange" brush defoliant for the U.S. Government at the W. G. Krummrich Plant?
- A. Monsanto was one of several companies asked to supply this compound during the Vietnam War. "Agent Orange" was a mixture of the commonly used herbicides 2,4-D and 2,4,5-T. We made 2,4-D at the Krummrich Plant and used some 2,4,5-T at the Krummrich Plant during the period from 1947 to 1968. We decided to cease production for economic reasons.
- Q. How many people were involved over the years in these operations?
- A. There may have been as many as _____. We are checking our records now to determine this information.
- Q. What are the long-term effects of exposure to "Agent Orange" dioxin?
- A. There are no known long-term physical effects but this subject has not been studied in depth. There are now under way, or will be under way shortly, studies to determine whether long-term effects, if any, have been produced from exposure to "Agent Orange."
- Q. What are the short-term effects?
- A. Acne - formed lesions, peripheral nerve involvement and liver disfunction. These symptoms, however, decrease and disappear over a long period of time.
- Q. What is the situation at Krummrich?
- A. Monsanto made 2,4,5-T acid at Nitro, West Virginia. A health study is currently under way to determine long-term health effects, if any, of "Agent Orange" dioxin exposure. Dioxin is the impurity in "Agent Orange" which is thought to be responsible for health effects. A situation at Nitro is different from that at W. G. Krummrich because there was gross exposure at Nitro due to accidental rupture in a manufacturing process. If the current studies under way at Nitro indicate that there may be adverse health effects from exposure to "Agent Orange" dioxin, we will institute similar studies at Krummrich.

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- Q. What is the status of the various class action law suits being brought against Monsanto and other "Agent Orange" producers?
- A. These suits are all in early stages of development. Monsanto intends to vigorously contest them on the grounds that they are not supportable in fact or law.

The potential health hazards of "Agent Orange" were fully explored by a committee of the National Academy of Science in 1974 which found no evidence of human health problems associated with exposure to this herbicide. The major constituents of "Agent Orange" (2,4-D and 2,4,5-T, containing trace amounts of dioxin) have been the subject of more than 40,000 scientific papers and technical articles in the past 30 years. These studies show that they are not significantly hazardous to human or animal life under normal and recommended conditions of use.

A recent article in the St. Louis Globe-Democrat quoted both the Veterans Administration and the U.S. Environmental Protection Agency as saying "there is no conclusive evidence of a correlation between exposure to herbicides in Vietnam and medical problems that may exist today."

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