

From the desk of
THOMAS M. BISTLINE

1000 13 1982

RTB

To
AMF advises this
has gone out.

RTB

A/O
file

CONFIDENTIAL
SUBJECT TO PROTECTIVE ORDER.

C14163

Monsanto

FROM
(NAME-LOCATION-PHONE) Allan M. Ford - St. Louis A2SA 4-2578

DATE : August 9, 1982

CC

SUBJECT :

REFERENCE :

TO : T. M. Bistline - E2ND

In responding to Dr. Hryhorczuk, we are trying to limit his investigation of our facilities as much as possible. He already has grant money for his study, so I doubt if we can put a stop to it.

He uses Tiernan's book, which indicates that we have made several chlorophenols, which in fact were not manufactured there. In addition, with the exception of 2,4,5-T esters, the other chlorophenols Hryhorczuk mentioned would not be expected to form 2,3,7,8-TCDD. Finally, with the case of 2,4,5-T, the part of the process likely to give off dioxin-containing waste was not operated in Illinois.

We're afraid that if we don't straighten out Hryhorczuk's thinking we will be accused of something we didn't do!

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jh
enclosures

RTB -

AMZ

A. M. Ford

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I have no problems with this response except for the lines I've highlighted on p. 1. The process descriptions are not Phocian Park gave NIOSH.

I've spoken to Ford about my objections to the letter. If we want to change it, we'll have to use some muscle. Any thoughts or reactions?

August 9, 1982

Daniel Hryhorczuk, MD, MPH
UNIVERSITY OF ILLINOIS
SCHOOL OF PUBLIC HEALTH
P.O. Box 6998
Chicago, Illinois 60680

My dear Dr. Hryhorczuk:

I'm sorry for not giving a more prompt reply to your letter of June 16, but vacation schedules have intervened.

In response to your proposal, the production of chlorinated benzenes likely to form chlorinated dibenzo-p-dioxins (CDD's) or chlorinated dibenzofurans at our Sauget, Illinois plant is to the best of our knowledge as reported in Tiernan's book (DIOXINS, US-EPA-600/2-80-197), with the exception of ortho nitroanisole and 3,4-dichloroaniline which were not manufactured in the Sauget plant. In addition, 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) was manufactured elsewhere and esterified at the Sauget, Illinois plant. I would suggest that Dr. Tiernan at Wright State might be a good source of additional information.

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Tiernan classifies most of the compounds mentioned in your letter as having a low probability for CDD formation. With the exception of the orthochlorinated phenols, the molecules do not meet the criteria of having ortho-substitution and good leaving groups. In the case of the orthochlorinated phenols mentioned, with the exception of 2,4,5-trichlorophenol, the remaining substitution on the ring suggests that the major product of coupling would not be the most toxic 2,3,7,8-tetra-CDD. In any event, our process for production of ortho-, para- and 2,4-dichlorophenols, the only ones still manufactured at

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August 9, 1982

Sauget, is carefully controlled to minimize formation of CDD's and predioxins.

The 2,4,5-trichlorophenol was converted to 2,4,5-T outside of Illinois and transferred to the Sauget plant where it was esterified to the n-butyl ester. It's been over thirteen years since we've used 2,4,5-T as an intermediate at the Sauget plant, but because of the substituents suggesting that the 2,3,7,8-TCDD might have been formed in the 2,4,5-T process, we, along with a number of other companies, are cooperating fully in an epidemiology study being conducted by NIOSH relating to all phases of the discontinued chlorophenol processes, as well as conducting our own internal research. For your information, I have enclosed a large as reported in Health & Environment, Vol. 10, No. 1, 1977, process description and process chemistry for the discontinued esterification process and the discontinued pentachlorophenol process at Sauget, which were not manufactured in the Sauget plant. In addition, Illinois. We are currently involved with five other defendants in litigation involving the 2,4,5-T esters and cannot disclose further detail during the course of this litigation on advice of counsel.

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The polychlorinated biphenyls (PCB's) were manufactured at the Sauget plant up until 1977, at which time manufacture was discontinued. We have not found any of the CDD's in the PCB's manufactured by the Monsanto Company nor have we seen any reports in the literature of such findings.

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Production and end use of the chemicals you mention are as described by

Tiernan, et al, and elsewhere in the literature. In dealing with the major product of concern would not be the most toxic 2,3,7,8-

Federal regulators, we have requested that production statistics remain

secret and, on advice of counsel, cannot violate that request by dis-

closure to you. In the same vein, our waste disposal at the Sauget plant

Daniel Hryhorczuk
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is involved in litigation with the State of Illinois. During the course of this litigation, our counsel advises us not to voluntarily disclose plant waste-related information.

I hope that we've been of some help to you in your endeavor.

Sincerely,

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