MONSANTO

From: James J. Collins, Epidemiology, A2SL, 4-8811

Date: May 8, 1992

cc: G. F. Fort
B. R. Friedlander
M. A. Pierle (w/o attachments)

Subject: Communication to Employees on Monsanto Update of the 1949 Accident at Nitro

Reference:

TO: D. Bartolanzo
T. Blank - Krummrich
K. Cahill
P. Conner
T. Kokotovich - Queeny
F. Krewet
L. Wassell
R. Kaley
M. McCombs
N. Pollock
P. Conlon - Nitro
D. Snively

We have our final draft letter to employees which includes your suggested changes. At your request, these letters are now plant specific. We have also attached a plant specific listing of where 2,3,7,8-TCDD and PAB exposures may have occurred. This was in response to requests made by several employees who previewed this letter. This listing will be included in the mailing. We also have revised our reader response card at your suggestion as well as at the request of the Biohazards Committee. Please review this information and return any final suggestions to me prior to May 23 as we want to begin the mailings before the end of the month.

J. J. Collins

DSW 134183

REDRAFT WORKER NOTIFICATION LETTER - NITRO
May 8, 1992

Dear X,

The results of two recent studies on the possible health effects of dioxin exposure may be of interest to you as an employee or former employee of the Nitro plant. The first study was conducted by the National Institute for Occupational Safety and Health (NIOSH) and completed in August 1990. A second study conducted by Monsanto was just completed and has been submitted for publication.

NIOSH is a federal agency that studies worker health. The NIOSH study included employees at two Monsanto plants (Nitro and Krummrich) and 10 non-Monsanto sites. Monsanto provided NIOSH with information on employees who worked in departments with potential dioxin exposure.

Among those exposed to dioxin as well as other substances, NIOSH did identify five cases of rare tumors classified together as "soft tissue sarcoma" and reported elevated death rates for respiratory cancer. **(For those persons receiving the NIOSH letter -** NIOSH should have already informed you of the results.)

Monsanto conducted a separate study of employees involved in a 1949 trichlorophenol accident at the Nitro plant. This accident released an unknown amount of dioxin. The Monsanto study updated a 1980 report on the health of workers involved. This updated study indicates workers exposed to dioxin alone do not have elevated death rates from any cancer, including soft tissue sarcoma. In fact death rates among this group were no different from workers not exposed to dioxin, or people living in the community. Potential dioxin exposure at the Nitro plant would have occurred in the departments listed on the attached table during the years indicated.

Monsanto's updated study also confirmed earlier findings that employees who worked with p-aminobiphenyl (PAB) have an increased risk of bladder cancer. A program has been in place for many years to inform workers of potential health hazards associated with PAB and to conduct medical surveillance on persons who were exposed. Potential PAB exposure at the Nitro plant would have occurred in departments listed in the attached table during the years indicated.

Other preliminary findings in the Monsanto study are increased mortality rates for: (1) respiratory cancer in employees who developed chloracne from the accident and also were exposed to PAB, and (2) soft tissue sarcoma in employees who had PAB

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exposure. These findings, however, should not be considered conclusive because of the small number of workers studied, the difficulty in correctly classifying soft tissue sarcomas, and the inability of the study to examine such factors as cigarette smoking and exposures to other chemicals.

An additional study is currently underway at the Nitro, Krummrich and Queeny plants to reexamine these preliminary findings. When this study is completed, the findings will be reported to you.

In view of these studies as well as other studies on dioxin, Monsanto's Medical Department advises that no action on your part is believed to be necessary. Those who want further information may contact Dr. Patrick Conner in the Department of Medical and Health Sciences, Monsanto, 800 N. Lindbergh Blvd., St. Louis, Missouri 63167. You can call Dr. Conner collect at 314-694-8807.

Sincerely,

Barry R. Friedlander, M.D.
Director of Medical and
Health Sciences

DRAFT May 8, 1992

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PAB and 2,3,7,8-TCDD Exposures at Monsanto - Nitro

Exposed to	Dept. and/or Bldg.	Years of Potential Exposure
PAB	Flectol H - Bldg. 34	1935-55
	Santoflex B - Bldg. 34	1935-55
2,3,7,8-TCDD	Pilot plant - Bldg. 32	1948
	2,4,5-T acid - Bldg. 34	1948-63
	2,4,5-T acid drying	
	Bldgs. 16, 21 and 46	1948
	Bldg. 79	1949-53
	Na 2,4,5-TCP - Bldg. 41	1948-50
	Bldg. 51	1950-63
	Na 2,4,5-TCP/2,4,5-T acid	
	Bldg. 92	1963-69

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REDRAFT WORKER NOTIFICATION LETTER - QUEENY

May 8, 1992

Dear X,

The results of two recent studies on the possible health effects of dioxin exposure may be of interest to you as an employee or former employee of the Queeny plant. The first study was conducted by the National Institute for Occupational Safety and Health (NIOSH) and completed in August 1990. A second study conducted by Monsanto was just completed and has been submitted for publication.

NIOSH is a federal agency that studies worker health. The NIOSH study included employees at two Monsanto plants (Nitro and Krummrich) and 10 non-Monsanto sites. Monsanto provided NIOSH with information on employees who worked in departments with potential dioxin exposure.

Among those exposed to dioxin as well as other substances, NIOSH did identify five cases of rare tumors classified together as "soft tissue sarcoma" and reported elevated death rates for respiratory cancer. (**For those persons receiving the NIOSH letter -** NIOSH should have already informed you of the results.)

Monsanto conducted a separate study of employees involved in a 1949 trichlorophenol accident at the Nitro plant. This accident released an unknown amount of dioxin. The Monsanto study updated a 1980 report on the health of workers involved. This updated study indicates workers exposed to dioxin alone do not have elevated death rates from any cancer, including soft tissue sarcoma. In fact death rates among this group were no different from workers not exposed to dioxin, or people living in the community. Potential dioxin exposure at the Queeny plant would have occurred in the departments listed on the attached table during the years indicated.

Monsanto's updated study also confirmed earlier findings that employees who worked with p-aminobiphenyl (PAB) have an increased risk of bladder cancer. A program has been in place for many years to inform workers of potential health hazards associated with PAB and to conduct medical surveillance on persons who were exposed. Potential PAB exposure at the Queeny plant would have occurred in departments listed in the attached table during the years indicated.

Other preliminary findings in the Monsanto study are increased mortality rates for: (1) respiratory cancer in employees who developed chloracne from the accident and also were exposed to

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PAB and 2,3,7,8-TCDD Exposures at Monsanto - Queeny

Exposed to	Dept. and/or Bldg.	Years of Potential Exposure
PAB	Dept. 26-P	1935-55
	2,4,5-T acid - CC Bldg.	1951-53
	Ag esters - WW Bldg. (Pilot plant); W Bldg. (Interim Mfrg.); AA, CC	1948-64

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PAB, and (2) soft tissue sarcoma in employees who had PAB exposure. These findings, however, should not be considered conclusive because of the small number of workers studied, the difficulty in correctly classifying soft tissue sarcomas, and the inability of the study to examine such factors as cigarette smoking and exposures to other chemicals.

An additional study is currently underway at the Nitro, Krummrich and Queeny plants to reexamine these preliminary findings. When this study is completed, the findings will be reported to you.

In view of these studies as well as other studies on dioxin, Monsanto's Medical Department advises that no action on your part is believed to be necessary. Those who want further information may contact Dr. Patrick Conner in the Department of Medical and Health Sciences, Monsanto, 800 N. Lindbergh Blvd., St. Louis, Missouri 63167. You can call Dr. Conner collect at 314-694-8807.

Sincerely,

Barry R. Friedlander, M.D.
Director of Medical and
Health Sciences

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DSW 134189

REDRAFT WORKER NOTIFICATION LETTER - KRUMMRICH
May 8, 1992

Dear X,

The results of two recent studies on the possible health effects of dioxin exposure may be of interest to you as an employee or former employee of the Krummrich plant. The first study was conducted by the National Institute for Occupational Safety and Health (NIOSH) and completed in August 1990. A second study conducted by Monsanto was just completed and has been submitted for publication.

NIOSH is a federal agency that studies worker health. The NIOSH study included employees at two Monsanto plants (Nitro and Krummrich) and 10 non-Monsanto sites. Monsanto provided NIOSH with information on employees who worked in departments with potential dioxin exposure.

Among those exposed to dioxin as well as other substances, NIOSH did identify five cases of rare tumors classified together as "soft tissue sarcoma" and reported elevated death rates for respiratory cancer. (**For those persons receiving the NIOSH letter -** NIOSH should have already informed you of the results.)

Monsanto conducted a separate study of employees involved in a 1949 trichlorophenol accident at the Nitro plant. This accident released an unknown amount of dioxin. The Monsanto study updated a 1980 report on the health of workers involved. This updated study indicates workers exposed to dioxin alone do not have elevated death rates from any cancer, including soft tissue sarcoma. In fact death rates among this group were no different from workers not exposed to dioxin, or people living in the community. Potential dioxin exposure at the Krummrich plant would have occurred in the departments listed on the attached table during the years indicated.

Monsanto's updated study also confirmed earlier findings that employees who worked with p-aminobiphenyl (PAB) have an increased risk of bladder cancer. A program has been in place for many years to inform workers of potential health hazards associated with PAB and to conduct medical surveillance on persons who were exposed. Potential PAB exposure at the Krummrich plant would have occurred in departments listed in the attached table during the years indicated.

Other preliminary findings in the Monsanto study are increased mortality rates for: (1) respiratory cancer in employees who developed chloracne from the accident and also were exposed to PAB, and (2) soft tissue sarcoma in employees who had PAB

exposure. These findings, however, should not be considered conclusive because of the small number of workers studied, the difficulty in correctly classifying soft tissue sarcomas, and the inability of the study to examine such factors as cigarette smoking and exposures to other chemicals.

An additional study is currently underway at the Nitro, Krummrich and Queeny plants to reexamine these preliminary findings. When this study is completed, the findings will be reported to you.

In view of these studies as well as other studies on dioxin, Monsanto's Medical Department advises that no action on your part is believed to be necessary. Those who want further information may contact Dr. Patrick Conner in the Department of Medical and Health Sciences, Monsanto, 800 N. Lindbergh Blvd., St. Louis, Missouri 63167. You can call Dr. Conner collect at 314-694-8807.

Sincerely,

Barry R. Friedlander, M.D.
Director of Medical and
Health Sciences

DRAFT May 8, 1992

DSW 134191

PAB and 2,3,7,8-TCDD Exposures at Monsanto - Krummrich

Exposed to	Dept. and/or Bldg.	Years of Potential Exposure
PAB	Dept. 247 - pilot plant	1936-55
	plant	1936-55
2,3,7,8-TCDD	Ortho-, para-, and di-chlorophenols - Dept. 237	1935-83
	Ag esters - Dept. 268	1960-70

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READER RESPONSE SURVEY

Dear Reader:

To help us with future employee communications, we are interested in finding out what you thought of our letter. Would you please take some time to evaluate the letter we sent you by filling out this survey. Your responses will be held strictly confidential.

Please circle the best response to the following questions:

1. Did you find our letter on the recent study easy to read?

Yes *No*

2. Was the letter too long?

Yes *No*

3. Did you receive enough information on dioxin?

Yes *No*

4. Before reading this letter, I thought my risk of getting cancer from being exposed to dioxin was . . . .

likely

somewhat likely

not at all likely

5. After reading this letter, I now think my chances of getting cancer from dioxin exposure are . . .

likely

somewhat likely

not at all likely

6. As a result of this letter, I will:

a. do nothing different	*True*	*False*
b. change my health related habits (smoking, drinking, etc.).	*True*	*False*
c. go to my doctor	*True*	*False*

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7. How important do you think it is to report to you on a study which shows an exposure at work may make you ill?

Very Important

Somewhat Important

Not Important

8. How important do you think it is to report to you on a study which shows an exposure at work will not make you ill?

Very Important

Somewhat Important

Not Important

9. I am working or have worked at the Monsanto plant called *(please circle one or more)?*

Krummrich *Nitro* *Queeny*

10. Would you be interested in helping us improve our letters to our employees and former employees about our health studies?

No *Yes (if yes, fill in your address in question 13)*

11. Would you like a complete copy of the report mailed to you?

No *Yes (if yes, fill in your address in question 13)*

12. Do you have any additional comments:

_____

_____

_____

_____

13. If you have answered yes in either question 11 or 12, please fill in your address.

Name: _____

Street: _____

City/State/ZIP Code: _____/_____/_____

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