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Kevin -

FYI

DSW 134250

THE DOW CHEMICAL COMPANY

HEALTH AND ENVIRONMENTAL SCIENCES
1803 Building
Midland, Michigan 48674

Telecopy Number: 517/636-1875
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TELECOPY TRANSMITTAL SHEET

Date: July 18, 1991

To: Terry Leet

Company Name: Monsanto Company

Telecopy Phone Number: (314) 694-6858

From: Greg Bond

Phone: (517) 636-9063

Number of Pages: 10
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Comments:

Material sent by: Diana Diamond

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Updated 8/89
cjatton

DSW 134251

THE DOW CHEMICAL COMPANY

MIDLAND, MICHIGAN 48674

July 3, 1991

Winifred L. Boal, M.P.H.
Epidemiologist
Screening and Notification Section
National Institute for Occupational Safety & Health
Robert A. Taft Laboratories
4676 Columbia Parkway
Cincinnati, OH 45226-1998

Dear Ms. Boal:

Thank you for your letter dated 14 June, 1991 and your invitation to comment on the draft dioxin notification materials you sent us, as well as on the notification process itself.

After careful consideration, Dow and Local 12075 of the United Steel Workers of America have decided to jointly conduct the cohort notification ourselves, with NIOSH oversight. We have worked together to draft an alternative notification letter using as a basis the materials you sent to us. A copy of our re-write is enclosed for your review and comment. Differences between your initial offering and our re-write are discussed below.

Format

We chose to structure the format of the letter using "bullets" within some major subject area headings. This approach is very similar to the one we used earlier in notifying a CMME cohort and has been well-received in pilot-testing with small groups of employees.

Dow employees are likely to be most interested in the findings among themselves and their co-workers. For this reason, we reversed the order of the presentation, so that the results among Dow employees are presented first, followed by the results among the remainder of the cohort. Note that the presentation of findings among the rest of the cohort excludes the data from Dow employees. We presented it this way rather than as the total cohort because Dow employees comprise more than 40% of the total group, and thus disproportionately influence the overall findings. Calculations were made from the data presented in Table 6 of the January 1991 report available through NTIS (#PB 91-125971).

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Items Deleted or Modified

We deleted reference to NIOSH's opinion that "...the results for the study as a whole are the most reliable". This is certainly arguable. As mentioned above, Dow employees comprised 40% of the total NIOSH dioxin cohort. This is not a small proportion. NIOSH acknowledges that the results for the Dow cohort are somewhat different from the overall results; they are even more different from those of the other 11 plants. Many epidemiologists and statisticians would question the wisdom of combining data across the 12 different plants which show such divergent results.

Risk estimates (e.g., 1 and a 7th times normal) were deleted in favor of simply presenting the observed and expected number of deaths. Our pilot-testing of risk estimates showed they created confusion.

We struggled with the best approach to presenting the soft tissue sarcoma (STS) findings. In the end, we felt it was better to simply present the number of confirmed STS cases and avoid a discussion of errors on death certificates, etc. Table 7 of the NTIS report was used as a guide. Thus, we report one case of STS among the Dow cohort (Case #4) compared with less than one expected, and 3 cases in the remainder of the cohort (Cases #1, 5 and 6) compared with less than one expected. Although we understand that this means comparing an observed number of cases that is based on all sources of diagnostic information with an expected number that is based on death certificates alone, and thus is technically incorrect, it accomplishes the goal of reporting the findings and is more "biologically correct".

In our view, no good purpose is served by presenting the results for injuries since NIOSH has acknowledged that they were not related to dioxin. Thus, we omitted any discussion of the injury findings.

We have omitted the factsheet. We found that it simply duplicated the material included in the letter.

The sources of information sheet has been modified to include a Dr. Michael Harbut, an occupational health physician consultant to Local 12075.

STLCOPCB4034211

MICHIGAN DIVISION
Date

Name
Address
City, State Zip

We are writing about the results of a health study conducted by the National Institute for Occupational Safety and Health (NIOSH) concerning the manufacturing of trichlorophenol (TCP), 2,4,5-trichlorophenoxyacetic acid (2,4,5-T), Silvex, Ronnel, and Erbon. These products may have contained very low levels of 2,3,7,8-tetrachlorodibenzo-p-dioxin or what is commonly known as dioxin. Dow and Local 12075 of the United Steel Workers of America are assisting NIOSH in communicating the results of this study.

First, we would like to assure you that the study results did not reveal an overall increase in health risk among Dow employees. You are among 2,092 Dow employees included in the study since our records show that you worked at some time in the past in production areas handling these materials.

The researchers were able to conduct the study without contacting you. They reviewed your work history and the work histories of 3, 080 other chemical industry employees who worked with these or other related products and were potentially exposed to dioxin.

We believe the following information should answer any questions you may have about the study.

The Study

The study included workers potentially exposed to dioxin between 1942 and 1984 at 12 chemical plants around the country. The study was undertaken to determine if there were any health risks among those potentially exposed to dioxin. Specifically, the researchers were interested in the occurrence of certain cancers, including soft-tissue sarcoma (STS), Hodgkin's Disease, non-Hodgkin's lymphoma, and cancers of the stomach, liver and nose. The study did not evaluate chloracne, a skin condition previously linked to dioxin exposure in some workers.

NIOSH compared death rates in the workers to death rates in the general U.S. population. The rates in the U.S. population gave them the number of expected deaths.

The study did not take into account the possible contribution of chemicals other than dioxin, lifestyle choices such as smoking or diet, or any combination of these, and other factors.

Communicating Study Results

In January of this year we sent letters to the homes of all employees still working in Midland and invited them to hear presentations of the results. Articles summarizing the major findings also appeared in the Dow Today and Onstream newsletters. We are now individually contacting all employees included in this study.

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STLCOPCB4034212

There are no specific health recommendations that we can make based on the results of this study other than your usual periodic health check-ups. You may want to consider sharing this information with your personal physician. If you, your doctor or members of your family have any questions, please call Dr. Lipps collect at (517) 636-6681. Alternatively, you may consult with one of the people listed on the enclosed sheet as a source of further information.

Sincerely yours,

Thomas E. Lipps, M.D.
Medical Director
Michigan Division
Dow Chemical U.S.A.
607 Building
Midland, MI 48667
(517) 636-6681

Dan Nadolski
President, Local 12075, United Steel Workers of America
321 South Saginaw Road
Midland, MI 48640
(517) 835-7161

The following physicians specialize in diseases caused at work (occupational medicine).

David Garabrandt, M.D.
Department of Occupational Medicine
The University of Michigan School of Public Health
1420 Washington Heights
Ann Arbor, MI 48109-2029
(313) 764-2594

Michael Harbut, M.D.
Center for Occupational and Environmental Medicine
15901 West 9 Mile Road, Suite 410
Southfield, MI 48075
(313) 559-6663

Kenneth Rosenman, M.D.
Department of Medicine
Michigan State University
B338 Clinical Center
East Lansing, MI 48824-1317
(517) 353-1846

The following agencies can offer advise about cancer prevention.

The Dow Chemical Company
Up-With-Life Program
Employee Development Center
Midland, MI 48640
(517) 636-3256

National Cancer Institute toll-free telephone number on different types of cancer: 1-800-4-CANCER.

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