Monsanto

FROM
(NAME-LOCATION-PHONE) J. W. Barnett, Jr. - G4WR - 4-8158

DATE: October 8, 1991

SUBJECT: Customer and Plant Communication on NIOSH Alert

REF:

TO:

W. J. Boyle - 1740
J. R. Jackson - 5040
J. T. McKean - 1670
R. F. Riek - 1010

cc:

J. F. Acquavella - A2SL
R. M. Bannister - A3ND
P. R. Conner - A3NB
K. M. Davies - 5040
P. A. Easterday - A3NL
J. D. Felder - G4WS
B. R. Friedlander - A3NA
W. D. Lambert - F2EN
J. P. Mieure - G4WT
C. Navarrete - G5NA
N. J. Pollock - G4WF
R. E. Walters - G5NA
S. G. Williamson - G5NA
M. W. Winkel - G5NA

Attached is the plant communication regarding the NIOSH alert on aniline. This communication resulted from a collaborative review of DMHS, Product Safety, Industrial Hygiene and Rubber Chemical business personnel of the scientific and workforce protection issues. It should be posted to inform the aniline workforce as appropriate.

Also attached is a customer letter which will be sent in the U.S. Other world areas should make their own decision as to the need for customer notification.

Should you have questions, please call me at 314-694-8158.

Jim

J. W. Barnett, Jr.
Manager, Product Safety

JWB/kvk

Attachments

DSW 134904

NIOSH Alert on Aniline and Monsanto Assessment

This bulletin is in response to the National Institute of Occupational Safety and Health (NIOSH) Alert on aniline. In the Alert, NIOSH recommended a number of steps to provide additional protection to workers with potential exposure to aniline. These recommendations are based on the conclusions they drew from a study of a Goodyear plant in New York State. An excess of bladder cancer was found in one of the buildings in that plant. Aniline was one of several chemicals used in that building. From that finding, NIOSH concluded that aniline was one of two chemicals that may have caused the excess of human bladder cancer.

Monsanto scientists, selected outside scientific experts, prominent scientists in other major chemical manufacturing companies, and the world's medical literature have all been reviewed and consulted on this matter. None of these parties support the conclusion that the excess of bladder cancer in this factory is likely to be related to aniline. This is based on the fact that despite over a century's use of this material in large quantities, no such excess of bladder cancer has been associated with aniline. Furthermore, other studies which have looked for such a relationship have not found aniline to be a cause of human bladder cancer.

Monsanto's practice has been to adhere to most of the procedures advocated by NIOSH.

- The company is informing the aniline workforce of the NIOSH findings by this communication.

- The Company's aniline workers are and have been routinely provided with assessments of their exposures even before this study was published. This practice will continue.

- Known and generally accepted effects of aniline exposure have been communicated to workers for years. Such communications will be ongoing and in accordance with Company practice. New information developed outside or inside Monsanto will be communicated in a timely manner.

The NIOSH Alert has recommended additional work practices to control exposure, use of chemical protective equipment to prevent skin contact, and extensive use of respirators to prevent inhalation. These practices have already been instituted within Monsanto in instances where the likelihood of significant skin or inhalation exposure exists. Furthermore, previous and ongoing industrial hygiene monitoring has demonstrated that exposures are 0.1 ppm on an 8 hr., TWA basis, or less in all production areas where aniline is utilized. To put this figure into perspective, the American Conference of Governmental Industrial Hygienists recommends that airborne exposures be limited to 2.0 ppm on an 8 hour TWA. Our airborne exposures are low and we have protective equipment practices in place. Therefore, we feel that the potential exposures of our employees to aniline are well controlled. We shall continue to monitor these exposures.

The Alert advises that the air monitoring for aniline exposure be performed periodically using a NIOSH-accepted method. This has been the practice within Monsanto for years and shall continue.

DSW 134905

However, we believe certain of the NIOSH recommendations are not applicable for our facilities. The NIOSH Alert has advised that special warning signs be posted; that special worker training be initiated; and that engineering controls be upgraded. Monsanto's existing Hazard Communication Training Programs fully inform our employees of the hazards of aniline. Therefore, no additional warning signs or worker training is warranted. Monsanto's practice has been to use engineering controls as the primary means to minimize employee exposure. This has been accomplished by the use of enclosed processes, separation of workers from the process, and appropriate ventilation systems. Our exposure assessments have verified their effectiveness.

The Alert recommended additional medical screening for bladder cancer. The only additional test this would add to the current Monsanto medical screening programs is the examination of urine for abnormal cells. This is a relatively common screening test, but one that has never been demonstrated to be effective in preventing death from bladder cancer. In fact, experts on the subject of human bladder cancer and its detection seriously doubt the effectiveness of such screening programs, even in populations who have had heavy exposures to known and generally recognized causes of bladder cancer.

Monsanto currently offers this additional test to its workers who had exposure in the past to p-aminobiphenyl. The Company will not deny such testing to any worker with current or past aniline exposure. Those employees who desire such testing should contact their local Monsanto medical unit to make that request. At the same time, we do not recommend the test because it offers little to no benefit.

In summary, the conclusions that NIOSH reached which subsequently lead them to the publication of this Alert are not supported by the data they cite, nor are they in agreement with the body of scientific literature. Exposures within Monsanto have been well controlled. We shall continue to monitor them and to work toward even tighter control in the future. As has been the Company's practice for years, medical surveillance is offered and will continue to be offered. We shall be monitoring the medical literature for the development of improved screening techniques and make them available once they have been proven. We shall keep you informed of new information that comes to our attention.

If you have any questions, please contact your plant medical unit.

Monsanto

Monsanto Chemical Company
800 N. Lindbergh Boulevard
St. Louis, Missouri 63167
Phone: (314) 694-1000

October 8, 1991

Customer Name
Address
City State Zip Code

Dear Mr. Customer:

Earlier this year, the National Institute of Occupational Safety and Health (NIOSH) issued the results of an investigation done at a rubber chemicals manufacturing facility. NIOSH determined that excess bladder cancers existed among workers and inferred that exposure to orthotoluidine or aniline was the probable cause. While Monsanto's rubber chemicals do not employ orthotoluidine in their manufacture, aniline is used so we were very interested not only in NIOSH's findings and its "Alert" bulletin on aniline.

Our immediate response to these findings, which included a review of the scientific literature and discussions with the operator of the affected facility, indicated that neither aniline nor orthotoluidine were the probable causes of the cancers. Thus, we made no immediate contact with our customers regarding an issue which did not appear to be a concern for our products. However, we did not stop there.

Since our initial review, we have studied the issue more thoroughly with Monsanto scientists, selected scientific experts outside of Monsanto, and prominent scientists from other major chemical manufacturing companies. None of these experts nor the existing medical literature support the conclusion that excess of bladder cancer in the facility is likely to be related to aniline. This is based on the fact that no excess bladder cancer has been associated with aniline in more than a century of its use in large quantities. Furthermore, other studies which have looked for a link, which NIOSH's study did not, have not found aniline to be a cause of human cancer.

We believe it is useful to communicate to our customers the results of our assessment of the NIOSH findings.

If you have additional questions on this issue, please contact me at 314/694-8158.

Sincerely,
James W. Barnett, Jr., Ph.D.
Manager, Product Safety

DSW 134907