PVC - Dr. Roush file
Medical f

Monsanto

NAME & LOCATION: Medical, A2SA

DATE: March 28, 1974

CC:

4-1-74
JRB:
YOUR COPY

SUBJECT:

REFERENCE:

TO: Dr. William Nessell
1870

Dear Bill:

Enclosed are the NIOSH recommendations. It is worth mentioning that OSHA may or may not follow these recommendations.

I would suspect that the liver function screen will be about as listed but it could well happen that OSHA will not follow the interpretations as listed in the NIOSH recommendations.

If I have any great thoughts on a course of action other than changing your profile to the recommended, I will let you know with alacrity.

George Roush, Jr., M. D.

GR/ln

Copied by MCA 3/25/74

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
CENTER FOR DISEASE CONTROL
ATLANTA, GEORGIA 30333
TELEPHONE: (404) 633-3311

March 22, 1974

Kenneth D. Johnson, Ph.D
Secretary, Technical Task Group
on Vinyl Chloride Research
Manufacturing Chemists Association
1825 Connecticut Avenue, N.W.
Washington, D.C. 20009

Dear Dr. Johnson:

Enclosed is the final draft of medical screening recommendations stemming from our meeting of March 2 concerning vinyl chloride liver disease. In composing these recommendations, we have tried as far as possible to take into account both the discussion which took place at the meeting and the written recommendations submitted thereafter. This material will now be incorporated into the recommendations being presented by NIOSH to the Labor Department's Occupational Safety and Health Administration for further action.

Thank you very much for your help in developing these recommendations.

Sincerely yours,

Clark W. Heath, Jr.

Clark W. Heath, Jr., M.D., Chief
Cancer and Birth Defects Division
Bureau of Epidemiology

Enclosure

h. Medical Surveillance

The following recommendations are directed primarily at medical screening to detect liver disease and/or hepatic tumor. They should be considered in the context of routine health screening for any general employee health problems, including non-hepatic health conditions potentially related to vinyl chloride monomer exposure. Routine health screening should include at time of initial employment the recording of past medical history and the performance both of a general physical examination and certain basic laboratory procedures (e.g., complete blood count, urinalysis, chest x-ray); provisions should also be made for routine periodic health followup examinations.

Employees covered by the following specific recommendations shall encompass all persons engaged in vinyl chloride monomer production and polymerization, including personnel peripherally involved such as in clerical and management assignments. The recommendations shall be applied both as a pre-employment requirement and as part of periodic health follow-up. Screening priority should be given to current employees with prolonged and close potential exposure to vinyl chloride monomer, whether in present or past work settings.

(i) At time of initial employment, or upon institution of screening, physical examination shall be performed with specific attention to detecting enlargement of liver or spleen by abdominal palpation.

(ii) At time of initial employment, or upon institution of screening and annually thereafter, a medical history check-list shall be completed by the employee. This list shall include questions concerning:

(a) alcohol intake
(b) past history of hepatitis
(c) past exposure to potential hepatotoxic agents, including drugs and chemicals.
(d) past history of blood transfusions
(e) past history of hospitalizations

Completed medical check-lists shall be reviewed by a physician and should be acted upon as medically indicated for each individual employee.

(iii) At time of initial employment, or upon institution of screening, a serum specimen shall be obtained for screening with respect to the following five bio-chemical determinations of liver function:

(a) total bilirubin
(b) alkaline phosphatase
(c) serum glutamic oxalacetic transaminase (SGOT)
(d) serum glutamic pyruvic transaminase (SGPT)
(e) gamma glutamyl transpeptidase (GGTP)

Additional tests that may optionally be considered for use in screening include lactic dehydrogenase (LDH), serum protein determinations, serum protein electrophoresis, and platelet count. Laboratory analyses shall be performed in laboratories accredited by the College of American Pathologists or licensed in accordance with the provisions of the Clinical Laboratories Improvement Act of 1967.

(iv) If results of laboratory screening are normal, screening shall be repeated on an annual basis. If the person being screened has been employed directly in vinyl chloride monomer production or polymerization for 10 years or longer, screening shall be repeated every 6 months.

(v) If one or more liver function tests are abnormal, serum testing shall be repeated as soon as possible, preferably within 2 to 4 weeks. If no abnormalities are present upon rescreening, testing should be repeated in 3 months.

(vi) If abnormalities persist on rescreening, the employee shall be removed from contact with vinyl chloride monomer operations and individualized medical workup shall be instituted. Suggested as initial steps in medical workup are a complete physical examination and various special procedures such as hepatitis B antigen determination and liver scanning.

If liver function abnormalities are determined to be unrelated to liver disease (e.g., elevated alkaline phosphatase in a young, physically active man or elevated bilirubin in Gilbert's syndrome) or to be transient (e.g., due to recent hepatitis or recent alcohol intake), the employee may be permitted to return to vinyl chloride-related employment, subject to individual medical evaluation.

(viii) In view of the preliminary results of animal toxicology studies, it is recommended that no woman who is pregnant or who expects to become pregnant should be employed directly in vinyl chloride monomer operations.

from the desk of

G. M. ELLSWORTH

~~[illegible]~~

~~R. Hornyak~~

~~D. Fletcher~~

~~D. B[illegible]~~

J. Belach.

These Nader's Raiders are also active in the VCM problem. We'll probably begin to see these articles appearing soon. Here's one they got blasted on by the govt.

— [illegible]

BF Goodrich File

NADER UNIT DISPUTED ON CANDLE HAZARDS

WASHINGTON, Jan. 5 (AP) — A member of the Federal Consumer Products Safety Commission has accused a Ralph Nader group of presenting "worthless calculations . . . intended to inflame rather than inform" the public about possible lead-poisoning hazards from certain candles.

"The Health Research Group petition was drawn either with abysmal ignorance of elementary physical science, colossal intent to deceive the public or both," Commissioner Lawrence M. Kushner wrote to Dr. Sidney M. Wolfe, director of the Nader organization.

"The calculations in the petition of possible concentrations of lead in air which might result from burning such candles were based on assumptions that are physically impossible and the results of these calculations were then used to infer a degree of hazard totally inconsistent with reality," wrote the commissioner, who has a doctorate in physical chemistry from Princeton.

The commission announced Dec. 21 that it would not immediately ban the candles.

Dr. Wolfe said Wednesday that the group's petition stated that the lead concentrations it cited as possible from burning candles with lead-core wicks were purely hypothetical.

Parts of Oregon, Idaho Exempt on Time Shift

WASHINGTO. Jan. 5 (UPI) — Claude S. Brinegar, the Secretary of Transportation, granted a temporary exemption yesterday from the Emergency Daylight Saving Time Act to several counties in Oregon and Idaho and redrew the time zone boundary in Kentucky.

Mr. Brinegar's action will permit legislators in those states to consider action to permanently exempt the zones from year-round daylight saving time.

The act will take effect at 2 A.M. Sunday as part of the national effort to conserve energy.

Hawaii, Arizona, Puerto Rico, the Virgin Islands and parts of Indiana voted earlier to exempt themselves from daylight time, and will not be affected by the changeover.

Chemical Marketing Reporter
March 11, 1974

VCM Worker Illness in Europe Has Been Identified

Reports circulated in European labor circles that fifty-three out of 160 workers in a German polyvinyl chloride plant had contracted angiosarcoma, a rare liver cancer, were apparently exaggerated.

The illness has since been identified as acroosteolysis, a less serious affliction that was spotted in this country in the 1950's and arrested by improved work practices.

Details about the origin of the reports have been difficult to acquire, but it has been learned that there has been a recent pattern of work-related illnesses at the plant operated by Dynamit Nobel in Troisdorf, Germany.

Contacted by the European editor of CMR for details, Dynamit Nobel officials were unavailable for comment. However, it is understood that the company's board of directors was convened last week to discuss the story (CMR, 4/11/73,Pg. 5) and issue a formal statement. As of the end of last week no statement had been received.

According to health officials in the US, who attempted to trace the story through European sources, the information first began to circulate following publication of a research paper last November by the Skin Clinic of the University of Bonn on illnesses suffered by workers at the Dynamit Nobel plant. The study was reportedly commissioned by Nobel officials themselves.

Apparently the company became concerned as worker illnesses (of the liver, spleen, and bones) became increasingly frequent and proceeded to introduce a series of safety measures and finally asked for the university study.

In the meantime, the company continued to improve its facilities. The Ministry of Health was informed and apparently began a still-active superintendance of the safety measures. The ministry is said to be satisfied with the progress being made.

The company has apparently met with the plant's workers' council to discuss the problem. Sources said that the quoted number of fifty three sick workers was probably inflated and that the figure of twenty nine attributed to the number of incapacitated workers is probably close to the actual number of workers showing any symptoms at all.

There are said to have been no new cases uncovered since the fall of 1973 and that many of those victims suffering finger bone deterioration (acroosteolysis) had begun to show signs of bone regeneration. It is said that no angiosarcoma was ever uncovered at the facility.

CMR has been unable to confirm this story, nor to examine the University of Bonn study. However, if these events are in fact the souce of the circulated cancer reports, then the Dynamit Nobel situation does not represent the significant new development that the stories implied. Regardless of the facts of the Nobel situation, however, there seems to be a growing body of evidence in Europe and more recently in the US, that VCM presents a potentially serious health threat, and may be carcinogenic.

In response to that evidence, much of it presented at hearings conducted by the Occupational Safety & Health Administration of the Department of Labor in mid-February, OSHA is expected to issue new work practice standards soon for all VCM and PVC facilities.

These standards are being designed by the National Institute of Occupational Safety & Health (NIOSH) of HEW. It was not clear last week what the new standards would be.

BF Goodrich
File

OSHA OPTIONS

There is the possibility that OSHA will promulgate a temporary emergency standard which is the only mechanism by which the agency can put mandatory regulations into effect immediately. However, the expectation is that the agency will issue additional voluntary standards, perhaps along the lines of work practice standards issued at the end of January on fourteen other alleged carcinogenic industrial chemicals, pending completion of the regular rule-making procedure, (which could take several months).

Many people have called for the establishment of a standard of no exposure, in effect a "closed system", at all plants dealing with VCM, including Anthony Mazzocchi an official of the Oil, Chemical & Atomic Workers International Union, and Dr Irving Selikoff, Director of Environmental Sciences of the Mt. Sinai School of Medicine, New York.

Dr. Selikoff warned against "wild" reactions, last week, such as "removing plastic ashtrays from the table." But he told CMR that, while scientific evidence is still sketchy, there is enough information available to conclude that "urgent control measures are already required."

On May 10, the New York Academy of Sciences will hold a meeting of "concerned experts" in an attempt to improve the state of knowledge about VCM and pathology.

Xerox copy:
J. R. Belschwender
P. E. Bureau
R. L. Bourget
W. E. Nessell

GME
3-11-74