



DOW CHEMICAL U.S.A.

REV
8(E)

Building B-101

OCCUPATIONAL HEALTH
TEXAS OPERATIONS
FREEPORT, TEXAS 77541

January 4, 1989



Accredited by
Accreditation Association
for Ambulatory
Health Care, Inc.

R&S 140303

D. O. Allen, Jr.
EDA
A-3850

xc: D. Cragar
R. Fike, M.D.
Summary File

OCCUPATIONAL HEALTH SUMMARY REPORT

This is a voluntary participation program. The group population is 31. Five individuals had current information and were not examined at this time. Twenty-six individuals were examined between September 2, 1988 and December 6, 1988 for a 100% participation rate.

The Chemical and Physical Agent Inventory (CPAI) for the Ethyleneamines plant shows that the chemicals of greatest concern are vinyl chloride, n-aminoethylpiperazine, diethylenetriamine, ethylenediamine, ammonia, piperazine, ethylene dichloride, still bottoms (heavy amines), tetraethylenepentamine, and triethylenetetramine. The Senior Lab technician, the Class 1 Operators, and the Control Operators C are followed on the Vinyl Chloride Medical Surveillance Requirement, which conforms with the OSHA Vinyl Chloride Standard. The remaining job classifications are followed on the periodic core examination.

The 1988 Noise Survey is summarized in I. H. Report No. A38-3367N. The eight-hour time-weighted average exposures are less than 85 decibels on the A-scale. These individuals do not need to be included in the Hearing Conservation Program.

The 1983-1986 Industrial Hygiene monitoring data for ethylene dichloride, vinyl chloride, ethylenediamine, diethylenetriamine, triethylenetetramine, and tetraethylenepentamine are summarized in I. H. Report No. A38-2901C. Employee eight-hour time-weighted average exposures were well below the Industrial Hygiene Guide (IHG) or were judged to be acceptable where an IHG did not exist.

There are four TSCA 8(d) chemicals present. They are diethylenetriamine, ethylene dichloride, pyridine, and nitrobenzene. Monitoring data is described above for diethylenetriamine and ethylene dichloride. Pyridine and nitrobenzene are used as laboratory chemicals and are present in small amounts.



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January 4, 1989

There were nineteen audiograms done as part of the routine periodic core examination. There were two standard threshold shifts as defined by the OSHA Noise Standard. These individuals' eight-hour time-weighted average exposures are less than 85 decibels on the A-scale.

Three individuals have medical limitation of respirator usage based on initial screening of the medical examination data. Please see the attached list for medical limitation of respirator usage. If these medical restrictions interfere with an employee's job requirements, further evaluation at the Occupational Health Department should be arranged to fully assess the need for medical limitation of respirator usage.

The liver is considered the main target organ for vinyl chloride. Five individuals of the 26 tested had minimal elevations of one liver enzyme of the five liver enzymes we test in each individual. This is considered an expected pattern in a group of this size and does not suggest any special toxic effect influencing the results of this group.

There are no health effects attributable to occupational exposure.

There were 26 core examinations done. Individuals with life-style factors amenable to medical or dietary intervention include the following: ten smokers, thirteen individuals who are overweight, four individuals with hypertension, and eleven individuals with elevated cholesterol levels. The Occupational Health Department will be happy to assist these individuals in modifying their life-style.

J. L. Bell
J. L. Bell
Industrial Hygiene Services
238-5031

C.K. Browdy M.D.
C.K. Browdy, M.D.
Occupational Health
238-5018

Approved:

11 Jan 89

Date

M. R. Gondek

M. R. Gondek, M.D.
Associate Medical Director
Occupational Health

Attachment

R&S 140304

ATTACHMENT

January 4, 1989

MEDICAL LIMITATION OF RESPIRATOR USAGE

The following three individuals may wear respirators for escape only:

The following 28 individuals have no medical limitation of respirator usage:

R&S 140305



DOW CHEMICAL U.S.A.

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Building B 101, Phone 3598

TEXAS OPERATIONS
FREEPORT, TEXAS 77541

August 19, 1987

R&S 140306

K. Thomson

EDA

A 3850

XC: D. Cragar

Summary File

Company
Western District of New York

The following 13 individuals from the Ethylenediamine Plant were examined in June and July, 1987:

All but _____ had hazard ratings of 2 or 3 for vinyl chloride and were examined under the Vinyl Chloride Medical Surveillance Requirement (MSR).

There were nine audiograms done. There are seven individuals (78%) with hearing losses. Three were worse than their previous audiograms. There were no standard threshold shifts as defined by the OSHA Noise Standard. Whatever the reason for an individual's hearing loss, we must continue to provide and enforce the use of hearing protection to minimize further hearing loss.

There were a few personal health problems found. These have been addressed on an individual basis.

All individuals should have been notified by letter of the results of their examination at this time. Anyone who has not received a letter should contact the Occupational Health Department for a copy.

There was 100% participation. If you have any questions, please call me.

C. K. Browdy M.D.

C. K. Browdy, M.D.
Occupational Health

jrd

Occupational Health Department



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