

The Dow Chemical Company
2301 N. Brazosport Blvd
Freeport, Texas 77541-3257

OCCUPATIONAL HEALTH SUMMARY REPORT

CATION: ETHYLENEAMINES

PERIOD COVERED: October 9 - November 13, 1995

MEDICAL:

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

12-27-95
Date

INDUSTRIAL HYGIENE:

D. Romo
D. Romo
Industrial Hygienist

12-28-95
Date

REVIEWED:

R. A. Caines
R. A. Caines
Plant Manufacturing Leader

1/3/95
Date

cc: L. J. Burmeier
Summary File

OCCUPATIONAL HEALTH SUMMARY REPORT

This is a voluntary participation program. The group population is thirty-two. Four individuals have current information and were not examined at this time. Twenty-eight individuals were examined between October 9, 1995, and November 13, 1995, for a 100% participation rate.

The Chemical and Physical Agent Inventory (CPAI) for the Ethyleneamines plant shows that potential exposures are low. All job classifications are followed on the periodic core examination.

The 1994 Noise Survey is summarized in I. H. Report No. A38-4960N. The eight-hour time-weighted average exposures were less than 85 decibels on the A-scale. These job classifications are not in the Texas Operations Hearing Conservation Program.

The 1983-1986 Industrial Hygiene monitoring data for ethylene dichloride, vinyl chloride, ethylenediamine, diethylenetriamine, triethylenetetramine, and tetraethylenepentamine is summarized in I. H. Report A38-2901C. 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 were twenty-seven audiograms done. There were no standard threshold shifts as defined by the OSHA Noise Standard.

There are no individuals with medical limitation of respirator usage. Please see the attached list.

The liver is considered the main target organ for vinyl chloride. Three individuals of the twenty-seven tested had minimal elevations of one or more 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. Two individuals had moderate elevations of two or more of the five liver enzymes tested in each individual. These two individuals have been restricted from contact with chlorinated solvents. They are presently working in job classifications with no contact to chlorinated solvents.

There were twenty-seven periodic core examinations done. Individuals with life-style factors that are amenable to medical or dietary intervention include the following: one smoker, twenty-four individuals who are overweight, one individual with uncontrolled hypertension, and twelve individuals with elevated cholesterol levels. Assistance in modification of these life-style risk factors can be obtained by contacting the Occupational Health Department (238-3591).

Attachment

CONFIDENTIAL

R&S151067

ATTACHMENT

December 27, 1995

MEDICAL LIMITATION OF RESPIRATOR USAGE

The following thirty-two individuals have no medical limitation of respirator use:

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REDACTED

R&S151068