

① H. J. Smith ② H. J. Smith



Air Products and Chemicals
INC.

XC

Bob Loefer G. B. M.
LB TETRA
M. C. H. R. R.

CALVERT CITY PLANT
INTEROFFICE MEMORANDUM

RECEIVED
FEB 06 1984

To: J. T. Barr

Date: 1 February 1984

From: D. G. Topolski

Copies:

Re: [REDACTED]

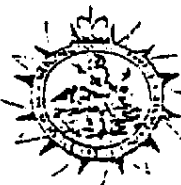
Per our telephone conversation of 1 Feb 84, attached is a copy of
[REDACTED] Death Certificate.


D. G. Topolski

DGT:sc

Attachment

AP00033962



METROPOLITAN HEALTH DEPARTMENT
311 23rd AVENUE, NORTH
NASHVILLE, TENNESSEE 37203
(615) 327-9313

This is to certify that this is a true and correct copy of the record filed with the Tennessee Department of Public Health, Vital Records, by the Metropolitan Health Department of Nashville and Davidson County.

This is valid only when the seal of the Metropolitan Health Department of Nashville and Davidson County is affixed.

8304948

THIS DOCUMENT CONTAINS NEITHER RECOMMENDATIONS NOR
CONCLUSIONS OF THE NATIONAL BUREAU OF STANDARDS
AND IS NOT TO BE USED FOR PROMOTING OR ENDORSING
SPECIFIC PRODUCTS, TRADE NAMES, OR ACTIVITIES.

* १९७५-७६ का अनुमान है।
* १९७५-७६ का अनुमान है।

1. LAST RESIDENCE WHERE CE-
LASED LIVED IN DEATH OC-
CURRED IN INSTITUTION, GIVE
EVIDENCE BEFORE ADMS

UNIT REQUESTED PRIOR TO
ACTIVATION OF ECDT BY
COUNCIL. CARRIAGE ON THE
JULY 1968 STATE

NEATH NOT ATTESTED BY
PHYSICIAN AUTHORIZED OF-
FICIAL SIGN WERE ANY
PHYSICIAN OR MEDICAL EX-
ECUTIVE EXECUTING CER-
TIFICATE MUST COMPLETE
PHYSICIAN MEDICAL CER-
TIFICATION WITHIN 48
HOURS POWER OF
CERTIFICATE CANNOT BE
EXTENDED

CERTIFICATE OF DEATH

TENNESSEE DEPARTMENT OF HEALTH AND ENVIRONMENT
 VITAL RECORDS

[illegible]

AP00033963

HUMAN RESOURCE SYSTEM EMPLOYEE DATA - 30 April 1984

Total number of APCI employees	16,804
Total number Allentown employees	3,922
Total number Chemicals Group employees	1,944

Calvert City employees		
Controller	17	
Business areas	2	
Manufacturing	538	
Total number Calvert City employees		557

Pace employees		
Customer Svcs.	4	
Controller	22	
Business areas	23	
Manufacturing	387	
Total number Pace employees		436

Medical System Employee Data - 12 June 1984

Allentown employees active in medical system	1,559	
Calvert City	558	
Field team	3,003	
Pace	464	
T-town Shop	61	
Total number employees active in medical system		5,645

Employees active in VCM physical system (includes contractors)

Allentown		
Fit for VCM	144	
Unfit for VCM	33	
Total Allentown Employees in VCM physical system		177

Calvert City		
Fit for VCM	398	
Unfit for VCM	120	
Total Calvert City employees in VCM physical system		518

Pace		
Fit for VCM	410	
Unfit for VCM	47	
Total Pace employees in VCM physical system		457

Earliest medical records on computer

1971	-	1 employee	}	All VCM records - physicals started at other sites in 1976.
1974	-	431 employees		
1975	-	701 employees		

NTK:bmw
6/13/84

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HIS is Final
This is Final
version. Dis put
IN [REDACTED] [REDACTED]
Files. Wm cc

AP00033965

AIR PRODUCTS

Deer

CHDI EST CHEMICALS MANUFACTURING/5987

Subject: OCCUPATIONAL HEALTH

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As indicated to you in June of this year, [REDACTED], a PVC worker at our Calvert City Plant, died on 28 October 1983 of illnesses which were initially diagnosed as cirrhosis of the liver (non-alcoholic). Subsequent evaluation by Armed Forces Institute of Pathology indicated the condition to be angiosarcoma of the liver. The family of [REDACTED] recently gave permission to have the autopsy materials evaluated by Fenton Schaffner, M.D., Chief, Division of Liver Diseases, the Mount Sinai Medical Center, New York, N.Y. On 27 September 1984 a confirmation of the diagnosis of angiosarcoma of the liver was made. This is our first case of angiosarcoma.

WORKMEN'S COMPENSATION CLAIM

██████████ is 60 years old and, at an actuarial life of 14.1 years and a weekly benefit of \$138.83, will receive \$102M during her lifetime. Since this case involves two employers, we anticipate that the state of Kentucky will pay the bulk of the claim, reducing APCI's total liability to less than \$25M. APCI's Legal Department will resolve any outstanding claim issues as soon as possible.

AP00033966

POTENTIAL FOR FUTURE ILLNESS

This case will be classified as an occupational illness, fatality. [REDACTED] started working in PVC in 1963. At that time, the harmful effects of high continuous exposures to vinyl chloride and the incidence of angiosarcoma were not recognized. His early work history included that of reactor cleaner, one of the jobs now recognized to have the highest exposures and incidence of angiosarcoma. Exposure levels at that time are believed to have been several thousand ppm for long periods and are many orders of magnitude greater than today's levels of less than 1 ppm. Few industrial hygiene controls were in effect at that time; the principal concern was the flammability of VCM.

APCI has about 75 persons with vinyl chloride exposure history approaching or past 20 years, with another 35-40 nearing the 15-20 year bracket. Based on the worldwide incidence rate of angiosarcoma in heavily exposed workers whose work history predates 1974, we would expect not more than one additional case of angiosarcoma may be found among our workers. There are no routine (non-invasive) diagnostic techniques which are effective for early detection of this disease, nor are there any known successful treatment procedures.

CONTROLS IMPLEMENTED TO PREVENT VCM OVEREXPOSURE

Starting in 1974, there have been many engineering controls implemented to control exposure. We believe the risk to the health of the present workers is very small. Among the controls which have been implemented are the following:

- a) Prohibition of discharge of vinyl chloride to the atmosphere.
- b) Closed system operation with purging and verification before opening any vessels to the atmosphere.
- c) Incineration of any purge or off gases to destroy vinyl chloride content.
- d) Development of "large reactor" technology which have reduced the number of places where leaks can occur.
- e) Stripping of PVC product to reduce the free vinyl chloride remaining.
- f) Use of on-line monitoring systems together with warning signals to give notice of any leak in the breathing zone.
- g) Implementation of a rigorous respiratory protection program to be used in conjunction with on-line monitoring and leak patrols.
- h) Use of leak patrols to quickly address even minor leak sources.
- i) A medical program which though non-specific for detection of angiosarcoma is designed to permit identification of those individuals who may be pre-disposed to liver abnormalities and may be at greater risk if they work with vinyl chloride.
- j) Changes have been made in PVC technology by the development of solvent cleaning methods and anti-fouling techniques to eliminate such high exposure jobs as reactor cleaner where Jesse Boren worked in his early career.
- k) Work practices and employee training in the hazards of vinyl chloride have been implemented.

AP00033967

Today we handle vinyl chloride in both our PVC plants and our Calvert City emulsions (EVCL) operations. We believe that the control measures that have been implemented are adequate and that there is little threat to the health of our workers from present day operations and exposures. We are also not aware of any actions we can take at this time which would be beneficial to those of our worker population (about 115) who may have been exposed to much higher and prolonged exposures to vinyl chloride in their early working careers.

MANAGEMENT COMMITTEE

I plan to review [REDACTED] case with the Management Committee on November 6th. Our principal thrust will be our Industrial Hygiene programs. You will recall we promised such a presentation to Dexter Baker when the claim was resolved.

R. E. GADOMSKI

REG:mcs

Attachments

AP00033968

CHEMICALS GROUP INDUSTRIAL

HYGIENE POLICY

AIR PRODUCTS RECOGNIZES AND ACCEPTS ITS MORAL AND LEGAL RESPONSIBILITY REGARDING SAFETY, HEALTH, AND ENVIRONMENTAL MATTERS. WE WILL CONDUCT ALL CHEMICALS GROUP ACTIVITIES WITH A MAXIMUM CONCERN FOR THE SAFETY, HEALTH, AND ENVIRONMENT OF OUR EMPLOYEES, OUR CUSTOMERS, THE COMMUNITIES IN WHICH WE OPERATE, AND THE GENERAL PUBLIC.

WITH REGARD TO INDUSTRIAL HYGIENE, IT IS OUR POLICY TO PROVIDE A WORK ENVIRONMENT FREE OF HARMFUL EXPOSURES TO CHEMICALS AND OTHER AGENTS WHICH MAY POSE A HAZARD TO HEALTH.

AP00033969

OCCUPATIONAL DEATH - ANGIOSARCOMA - [REDACTED]

DATE OF BIRTH: 29 AUGUST 1922
DIED: 28 OCTOBER 1983
AGE AT DEATH: 61

WORK HISTORY:

21 MARCH 1960 - HIRED AS MATERIALS HANDLER IN PLASTICIZER PLANT

1 JAN. 1962 - TRANSFERRED TO PVC COMPOUNDING AS A MATERIALS HANDLER

1 JAN. 1963 - TRANSFERRED TO PVC POLYMER AREA AS AN OPERATOR TRAINEE

31 DEC. 1970 - CALVERT CITY PLANT ACQUIRED BY APCI

30 JULY 1982 - TRANSFERRED TO UTILITY AREA

8 SEPT. 1983 - WENT ON SICK LEAVE

DATE OF EMPLOYMENT TO DATE OF DEATH: 23 YEARS
DATE INTO PVC TO DATE OF DEATH: 20 YEARS
TIME IN PVC AS AN APCI EMPLOYEE: 11½ YEARS

AP00033970

ANGIOSARCOMA CASES BY COUNTRY

UNITED STATES	35
WEST GERMANY	21
FRANCE	17
CANADA	10
UNITED KINGDOM	8
SWEDEN	5
YUGOSLAVIA	4
ITALY	4
CZECHOSLOVAKIA	2
JAPAN	2
NORWAY	1
BELGIUM	1

TOTAL	110
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