



INTERNAL CORRESPONDENCE

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Medical Group Health Log UC 149-2
VC

PLANT MGRS. FILES

CHEMICALS AND PLASTICS

P. O. BOX 471, TEXAS CITY, TEXAS 77590

TO (NAME) Mr. G. F. Tacquard
COMPANY
LOCATION TEXAS CITY PLANT

DATE February 26, 1975

COPY TO Mr. R. W. Sesler, 515 ✓
Mr. R. L. Frantz, 515
Mr. K. E. Ross, 515
Mr. R. N. Wheeler, 514
Mr. R. J. Hanna, 511

SUBJECT PVC Resin VCM Analysis

Dear George:

Your timely letter of February 15 covering PVC VCM analysis was enlightening and sincerely appreciated. Your group has responded magnanimously to the subject task and we are all most grateful for this. The sampling frequency will probably not decrease but significantly increase as the production unit fine-tunes its techniques for residual VCM reduction and accurate commercial data is required. I fully support your recommendation that another 5830 A be purchased and that we proceed to place it on order without further delay.

Respectfully,

M. E. Eisenhower

MEE/ebm

UCC 091181

Preview 2/27/15

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INTRODUCTION TO VCM TRAINING PROGRAM

Following the discovery in 1974 that a number of workers engaged in the manufacture of vinyl resins had died of a rare form of liver cancer called angiosarcoma, OSHA issued a Standard on October 4, 1974 covering workers exposed to vinyl chloride.

Certain facets of this standard that will be covered in detail in this training program require significant changes from past practices.

Monitoring of exposure will be required. Two techniques will be employed, an on-sight gas analyzer that will provide a continuous reading of the level of vinyl chloride in the work place and individual personnel monitoring to backup and substantiate the data provided by the area monitor.

Regulated areas will be established where vinyl resin is manufactured or packaged and where vinyl chloride monomer is stored or handled whenever the permissible exposure limit is exceeded. Access to regulated areas shall be limited to authorized persons and a daily log of persons who enter shall be maintained. These regulated areas will be appropriately marked by barricades and signs.

The wearing of respirators will be required where worker exposure may exceed certain limits.

Protective clothing that fits the situation will be required for various levels of potential exposure.

Training programs such as the one being presented here, will be provided.

A medical surveillance program will establish each employees' health and his suitability to continue in an area where exposure to vinyl chloride is a

UCC 091182

possibility.

A copy of the full Standard as issued by OSHA will be made available to any employee upon request to his supervisor.

M. E. Eisenhower

UCC 091183

Vinyl chloride is a flammable gas with a sweet pleasant odor. It is used to make a solid material called polyvinyl chloride. As PVC it has a multitude of uses in the plastics industry as pipe, records, insulation, upholstery, kitchen food wraps, shower curtains, floor tiles, and many more every day plastic products. The vinyl chloride gas has been used as an anesthetic agent and as a propellant in spray cans. It has long been recognized that the gas in high concentrations of 6,000 to 80,000 parts per million may cause lightheadedness or wooziness, symptoms resembling drunkenness, and even death. On removal from exposure to fresh air, the symptoms usually clear up quickly.

In January, 1974, three deaths due to a rare cancer of the liver were discovered in workers who had had a long-term high level exposure to vinyl chloride. Subsequently an intensive search of all former vinyl chloride workers and medical testing of active workers uncovered fifteen cases out of 6,000 workers since 1961. This is statistically significant since only about twenty cases of this cancer affecting the walls of the blood vessels of the liver are reported each year. It is called angiosarcoma and this cancer has also been caused by arsenic and by an x-ray dye called thorium dioxide. Animal experimentation has also produced this condition in mice by long-term exposures of 50 ppm of vinyl chloride.

Every employee will be offered an examination prior to being assigned work in the regulated area. The examination may be repeated annually for

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the first ten years; following this, it will be offered every 6 months.

The examination will consist of a medical history with special attention directed towards drug and chemical exposures, hepatitis or other liver disease, blood transfusions, alcoholic intake and smoking. A blood sample will be drawn for analysis of five special liver function tests and finally a clinical examination will be performed with special attention being directed towards detecting enlargement of the liver or spleen. These tests are not for diagnosing a cancer but are intended only as a screening to determine whether or not the employee is at any risk in continuing to work in the regulated area and whether he may safely use a respirator.

The results of the examination are available to you and to your personal physician on request. By law they may also be inspected by an OSHA compliance officer. They will be kept by the Medical Department indefinitely.

The examination is purely voluntary on your part. If you do not choose to take it we request you sign a statement to this effect. You will again be offered the examination at the appropriate intervals.

The Medical Division will welcome any questions concerning acute or chronic toxicity of vinyl chloride and will be happy to provide you or your physician with any information we have.

UCC 091185

*Statement of
suitability
continue
work in
area will
be provided.*

*Positive statements on
findings to date at SAS - no cases*