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January 12, 1972

Memorandum for the Record

Subject: Review of Dr. Hurst's Medical Study of the Tyler Plant Employees
January 6, 1972

The subject review took place at the East Texas State Chest Disease Hospital and the following participated:

Dr. George Hurst	- Hospital Director
Dr. Richard Spiegel	- NIOSH
Mr. Richard Lemm	- NIOSH
Dr. Lee Grant	- Medical Consultant to Pittsburgh Corning Corporation

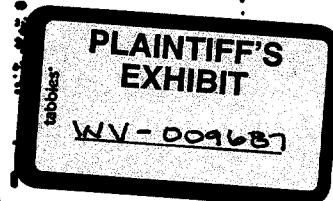
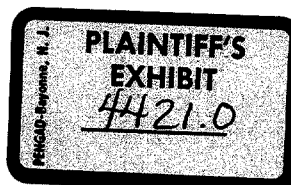
The medical data reviewed was that obtained by Dr. Hurst's group and by NIOSH on approximately 60 Tyler Plant employees. Also available were additional chest X-rays taken on some of these employees in 1969. The standards used in evaluating the pulmonary function data is attached. The blood gases standards used are as follows:

P.H.	7.4
PCO ₂	35-45
PO ₂	85-90

NIOSH used the following criteria in making an epidemiological diagnosis of asbestosis. Three of these criteria must be positive to make the diagnosis.

- I. FVC (+ if observed is less than 80% of predicted)
- II. Dyspnea (+ if Dyspnea occurs while walking with people of own age on the level)
- III. Rales (+ if at least one area of persistent rales is observed)
- IV. Clubbing (+ if all of following are present: doming of nail, floating of nail and flattening of the base or loss of angle)
- V. X-ray (+ if 1 or more classification for pneumoconiosis is read by NIOSH experts)

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Using the above standards and criteria the following summary of findings was made:

An epidemiological diagnosis of asbestosis was made on seven employees thus far. Additional such diagnosis may develop as a result of the X-ray review by the NIOSH panel of experts. Six of these seven showed a "mild reduction" in carbon monoxide diffusion capacity. The seventh showed a normal diffusion capacity. Only one other employee showed a "mild reduction".

There appeared to be an increase in the number of employees showing abnormal findings associated with the lungs in the employee group who have worked 10 or more years in unibestos manufacturing, i.e., 15 of 17 employees, than those who have worked less than 10 years, i.e., 14 of 42 employees. The workers with 10 or more years in unibestos manufacturing had an average age about 10 years greater than the average age of those with less than 10 years in unibestos manufacturing. Abnormal findings associated with the lungs increased in number with increasing age. All of the employees with abnormal findings had a long history of cigarette smoking. Sixteen of these employees showed a mild and two a moderate obstructive defect in their pulmonary function studies. An obstructive defect is felt to be associated mainly with the effects of smoking. Nine employees showed a mild and three a moderate restrictive defect in their pulmonary function studies. Interstitial fibrosis in asbestosis is one of several possible causes of a restrictive defect. However, in this study the restrictive defect occurred in only four of the 17 employees with 10 or more years in unibestos manufacturing, while it occurred in 8 of 34 employees with less than 5 years in asbestosis manufacturing.

Eight employees had abnormal findings not associated with the lungs such as hypertension or obesity.

It was determined that 23 employees will be counseled or examined further by Dr. Hurst based upon the review of the medical data. Six of these employees will, in addition, be re-examined by Dr. Hurst in 2 years and one will be re-examined in 1 year.

When the counseling is completed, Dr. Hurst will prepare a report on each of the employees including the medical data obtained, an interpretation of the data and the nature of the counseling provided. As requested by Mr. Steven Vodka, Citizenship-Legislative Department of the Oil, Chemical and Atomic Workers International Union, these employees' medical reports will be sent to the employees.

When NIOSH receives the results of the reading of the X-rays by the pneumocentesis panel of experts, it will notify those employees who have abnormal findings advising them either to see Dr. Hurst for lung

abnormalities or their own personal physician for other abnormalities. A copy of the letter, along with a report of their findings, will be sent to the employee's personal physician on the employee's request and to Doctors Hurst and Grant.

Dr. Grant will send letters to all employees without abnormalities advising them of this fact. He will not send this until after receiving the results of the NIOSH pneumoconiosis panel readings.

Lee B. Grant, M.D.

Lee B. Grant, M.D.
Medical Director

LBC:lh

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