November 6, 1962

Mr. A.L. Link
United States Rubber Company
Hogansville, Georgia

Dear Mr. Link:

In order to safeguard the health of the Asbeston employees, to establish a method for the early detection of asbestosis, and to evaluate from a functional standpoint the patient's ability to breathe we have developed a multifacted program.

(1) The patient is annually given a thorough history and physical examination, with specific reference to the respiratory system.

A routine examination of the blood and urine is performed at this time.

The examination is directed not only to the respiratory system but also to the general health of the patient and has resulted in detection and early treatment of many other diseases, such as diabetes and hypertension; which otherwise might have produced considerably greater morbidity before the worker finally sought help.

(2) Chest x-rays are taken on an annual basis and compared serially for changes due to asbestosis; and at the same time any other evidence of disease which can be demonstrated by the x-ray.

(3) Dust count data is obtained and accumulative exposure at different work stations calculated.

We think that the total accumulative exposure has a considerable bearing on the development of asbestosis.

(4) Pulmonary (lung) function studies have been carried out on many workers; in some instances, more than once.

These studies are aimed at an evaluation of several component but different parts of lung function.

1. Measurements of the static volume of the different lung compartments; ie, how much air the patient can breathe in and expell, and how much air (residual volume) remains in the lung.

2. Measurements of the patient's ability to move air, in or out of the bronchial passageways and the time required to do so. These are ~~impotent~~ important measurements in relation to airway obstruction, such as are found in chronic bronchitis and/ or emphysema.

0002603

3. Measurement of the effective distribution of inhaled air (oxygen). It is not enough that the patient is able to inhale air. It must be, for greatest effeciency, distributed as evenly as possible to air sacs (alveoli) which are profused by functioning blood vessels.

4. Measurements of the patient's ability to move air out of the lungs and into the blood vessels (diffusion) and adequately saturate the blood hemoglobin with oxygen.

The last measurement(a rather complicated thing) is the most critical in terms of asbestosis; for in asbestosis, the diffusing ability of the lung for oxygen is impaired.

The general purpose of the program has two major implications.

Primarily it is a program of preventive medicine, aimed at maintaining the health and physical welfare of the worker-patient.

Secondarily, it is a program of enlightened management-employee relations, which also provides the company with practical safeguards against the development of crippling and costly occupational disability.

Yours very truly,