plate like, five microns or over in size.

Recent investigations have indicated that the inhalation of asbestos particles ten microns or less in size is even more hazardous than was originally believed, and that in order to prevent harmful effects concentrations should be kept below five million particles (10 microns or less) per cubic foot. The physiological effects have already been discussed under "ASBESTOSIS" so need not be given any further consideration. Men handling asbestos float should be required to wear approved respirators.

D - GROUND MICA: Ground mica (80 mesh) is used in the manufacture of axle grease. It comes in 100 pound burlap bags. About fifty pounds of ground mica is used per batch and an average of five batches are made per month. The period of exposure will not exceed ten minutes a batch. Handling ground mica produces an average of 2,577,120 particles ten microns or less in size, per cubic foot. About 60% of these particles are transparent irregularly shaped scale like in appearance under the Konimeter microscope, and five microns or less in size; about 40% are over ten microns in size. The transparent plates have small lines or fissures and appear to contain small air bubbles.

Although ground mica has never been considered a hazardous dust, some recent studies made among the workers in North Carolina indicate that continued exposure to large quantities of ground mica over a period of years will produce a fibrosis. However, there is very little probability of any trouble where concentrations are kept below 10,000,000 particles per cubic foot of air and where the exposure to mica dust is such a small percentage of the employee's working time.

E - SULPHUR: Sulphur flour is used for sulphurizing cutting oils and in the preparation of special lubricants for hypoid gears. Crude sulphur is used in the manufacture of sulphuric acid and in the treatment of gasoline and naphtha for removal of impurities such as the mercaptans.

Sulphur Flour: Sulphur flour comes in paper-lined wooden barrels, 100-pound cloth bags, or 150-pound burlap bags. About 2500 pounds of this sulphur is dumped into the melting kettle by two men with an average service of twelve years, once a day. Their exposure to the dust which results from handling and dumping the bags, an average of 1,540,608 particles, ten microns or less, per cubic foot, is about fifteen minutes per man per shift on an average. No goggles or respirators are worn. About 90% of the dust particles in samples taken during the dumping of the sulphur flour were slightly angular crystalline in appearance under the Konimeter microscope, and five microns or less in size; 10% were semi-opaque, rounded, and over five microns in size. The larger particles appear to contain small air bubbles. There were also a number of very small specks.

About 370 pounds of flour sulphur is used per batch in the preparation of hypoid gear lubricant. Two batches are made per week on an average. The exposure to the sulphur dust is only about two hours per week on an average. Since the sulphur is dumped into drums of oil being agitated by a rapidly revolving propeller type mixer more dust is produced than where the bags are simply dumped into a kettle. Samples taken during this operation had as high as 6,910,080 particles, ten microns or less in size, per cubic foot. The average was 3,783,552 particles per cubic foot. The dust particles had the same characteristics as those given in the preceding paragraph.

Crude Sulphur: Crude sulphur comes in box cars holding about 90,000 pounds, usually from Freeport, Texas. Towers are filled with this sulphur by four