FILE NAME: WR Grace (WRG)

DATE: September 16, 1964

DOC#: WRG310

DOCUMENT DESCRIPTION: 1964 Inspection results on visit to Calgary Zonolite plant

Observations on a visit to the Zonolite plant, Calgary.
16 September 1964

Both expanding machines were operating. One machine was producing normal Zonolite fill, whilst the other was producing the waterproof masonry fill. It was a warm day and all the windows were open. The plant was very dusty, and considerable amounts of dust issued from various cracks and openings in the machines. Most of the dust appeared to have a fairly large particle size, and four test samples were were taken from the atmosphere at various locations in the plant. Counts of the dust particles in these samples varied from 70,000 to 135,000 particles per cubic foot having a diameter less than 10μ (0.01 mm). It is the particles less than 10μ in diameter which would be small enough to penetrate the lungs and cause the trouble mentioned by Dr.Siemens. Particle counts less than 1,000,000 per cubic foot(less than 10μ in diameter) are not normally thought to cause any trouble. A more detailed air sampling investigation with more sophisticated equipment appears to be necessary in order to define more accurately the conditions prevailing in the plant. We hope to be in a position to do this in a few weeks time.

It was noted that a special mix known as 'Mono-Kote', containing a fairly large amount of ground asbestos, is occasionally prepared. Asbestos is well known as the cause of lung fibrosis, and the influence that the mixing of 'Mono-Kote' may have had is an unknown factor. We hope to be able to take air samples near the mixer next time a batch of 'Mono-Kote' is prepared.

It is most important that dust respirators should be worn when any work is done with ground asbestos. It was noticed that two respirators were available in the mixing room, but these appeared to be dusty and in an unhygienic condition. It is advisable that respirators should be issued on an individual basis, and should be kept clean and covered when not in use.

A suitable for use throughout the plant would be the MSA 'Dustfoe' 66 or equivalent. This is a light respirator approved by the U.S. Bureau of Mines as suitable protection against fibrosis-producing dusts. Care should be taken that the respirators should be properly fitted for each individual. Proper maintenance of the respirators and regular filter changes are important.

H.Buchwald,