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Observations were made at Tilo Company, Inc., Stratford, Connecticut, on January 11, 1968. Air was sampled for particulate loading at the raw materials feeding station on the second floor directly above the asbestos slurry tank. No other measurements except visual observations were made.

RESULTS

The dust found in samples in impinger flask liquid used to sample during the operator's cycle of about 20 minutes was:

No. 1 1.4 million particles per cubic foot.

No. 2 5.9 million particles per cubic foot.

In the areas where stone granules and mica are applied to opposite sides of asphalt sheeting, there was gross evidence of dustiness. However, the equipment was not in operation due to repairs, so no air sampling could be done.

Sound pressures were extremely interesting in certain areas, particularly near a large vacuum pump. There may be no hazard to hearing here, but there could be near the log shredder at the start of the process in the felt mill.

Both noise and potential dustiness were observed near the machine that puts the finished edges on asphalt shingles.

DISCUSSION

The current controversy about a suspected relationship between inhaled asbestos and cancers of the lungs and peritoneum justifies careful and continued surveillance of any and all uses of asbestos, and the shaping (like sawing, grinding, etc.) of asbestos products. One school of thought blames only crocidolite

(asbestos fibers) and exonerate chrysolite (asbestos fibers), but others are inclined to indict "asbestos". The fact that only "long fiber" chrysolite asbestos is used at the Stratford plant is fortunate, no doubt.

The dust found in samples No. 1 and No. 2 was so little as to seem non-hazardous so far as asbestosis (as distinguished from cancer production) is concerned. Under the microscope, no fibers were seen that had the characteristic appearance of asbestos fibers and this suggests: (1) the dust was all either cement or limestone (both are added along with asbestos to make the slurry), or (2) the asbestos fibers were present but so slender, say 0.01 to 0.1μ in diameter, that even fibers 10 to 20μ in length could not be seen using the standard methods of looking at dust with a microscope. The point of this part of the discussion is intended to suggest that additional samples must be collected to confirm, if possible, the possibility that few or no significant number of asbestos fibers get into the work area. Other procedures may be used, perhaps, to greater advantage for this purpose.

Sample No. 2 was unusual because the operator, while performing the routine operation of filling a conveyance by shoveling into it a proper amount of ground scrap shingles, caused a high section of the scrap to cascade to the floor generating a brief but heavy cloud of dust. This probably accounts for the greater amount of dust found in this sample, since no similar episode accompanied the earlier work cycle during which Sample No. 1 was collected. Unless there was a significant but undetected number of asbestos fibers in these samples, there need be no great concern about dustiness near the slurry tank.

RECOMMENDATIONS

Additional samples need to be collected to adequately appraise the [redacted] dustiness of the manufacturing processes at the Stratford plant.

Noise level measurements should be made during some future visit to the plant.

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