



May 8, 1970

Intra Company

Mr. R. Austell
Safety Engineer
Dearborn Glass Plant

Subject: Talc Dust Concentrations, Autolite Bending Lehr - Dearborn Glass Plant

As requested an industrial hygiene study of talc dust concentrations at the entrance to the Autolite bending lehr was conducted on April 23, 1970. The results of the air samples taken during the study are contained on the attached data sheet.

The operation studied consists of spraying talc between the windshield before they are loaded into the bending lehr. Four men are employed in the area, but the two men loading the lehr receive the principal exposure. The area is ventilated by general dilution from an overhead make-up air unit and by a man cooler fan. There is no exhaust ventilation in the area.

Both impinger samples and filter samples for total particulate were taken during the study. The Threshold Limit Value of 20.0 million particles per cubic foot for airborne talc dust is based on impinger samples analyzed by a standard light field method. There is no TLV for talc₃ based on gravimetric sampling, but the TLV for inert dust is 15 mg/M³. The samples taken for gravimetric analysis were taken because the soluble nature of the talc dust can contribute to abnormally low results as indicated by the difference between the two types of samples taken.

Based on the statement in the preceding paragraph and the known toxicological properties of talc dust, we believe that this problem should be evaluated on the basis of the gravimetric sampling taken. Therefore, since both of the gravimetric samples taken exceed the TLV of 15.0 mg/M³ for inert dust, it is recommended that local exhaust ventilation be installed at the operation studied.

If there are any questions, or if we can be of further assistance, please don't hesitate to contact us.

Henry B. Lick
Industrial Hygienist

cc D. L. Block, M.D.
A. W. Carpenter
J. Shannon

Attachment

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Data Sheet

Dearborn Glass Plant

April 28, 1970

<u>Location</u>	<u>Airborne Dust Concentration in Million Particles per Cubic Ft. Air</u>	<u>Airborne Dust Concentration in MG/M³</u>
Threshold Limit Value	20.0	15.0
1. Loader at entrance to lehr, worker's breathing zone air sample.	7.6	17.4
2. Area near lehr, general room air sample.	- -	22.2
3. Area next to lehr control panel, general room air sample.	2.9	

Instrumentation: MSA Monitaire Pumps using midget impingers and Unico Model 30 pump with Gelman Type A fiber glass filters.

Analysis: Standard light field count and gravimetric analysis of filters.

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