

DIVISION OF SAFETY AND HYGIENE
INDUSTRIAL COMMISSION OF OHIO

April 11, 1960

PLAINTIFF'S EXHIBIT

K-2020

Mr. James H. Fluker, Superintendent
Division of Safety and Hygiene
Columbus 15, Ohio

Re: Kimble Glass Company
Columbus, Ohio

1. On March 21, 1960 a visit was made to the above-named company to check dust conditions.
2. Contact was made with Mr. Raymond J. Laddy, Safety Director.
3. The company manufactures television picture tube shells.
4. A cutting abrasive, containing 97 per cent free silica, is mixed with water and sprayed on molds which are enclosed in a machine. The molds are then removed, cleaned, and dried with forced air.
5. Dust counts were taken and the results are as follows:

<u>TEST</u>	<u>LOCATION</u>	<u>MPPCF*</u>
A.	In the breathing zone of the vapor blaster operator.	3.1
B.	Approximately 30' from vapor blaster machine to obtain general dust concentration.	1.7
C.	Breathing zone of mold grinder operator.	4.36

*MPPCF - million particles per cubic foot of air.

6. According to Bulletin No. 203 the maximum allowable concentration for dust containing from 5 to 50 per cent free silica is 20.0 million particles per cubic foot of air. The maximum allowable concentration for dust containing over 50 per cent free silica is 5.0 million particles per cubic foot of air. The Division of Safety and Hygiene recommends that the dust concentration, if at all possible, be kept below 2.0 million particles per cubic foot of air.
7. A dust sample was taken to determine the per cent of free silica in the breathing zone of the vapor blaster operator. A sufficient quantity of dust was not obtained for a reliable X-ray diffraction analysis.
8. It is recommended that:
 - A. The company attempt to replace the silica abrasive with a harmless abrasive.
 - B. water under pressure be applied to the molds so as to wash away most of the silica abrasive before air is used to dry them.
9. It was a pleasure to visit this company and their cooperation was greatly appreciated.

Respectfully submitted,

Richard Hempy
Richard Hempy
Industrial Hygienist

DeWitt Huffman
DeWitt Huffman
Industrial Hygiene Engineer