FILE NAME: Goodyear (GY)

DATE: 1947

DOC#: GY002

DOCUMENT DESCRIPTION: Government Inspection Results

DIVISION OF SAFETY AND HYGIENE
INDUSTRIAL COMMISSION OF OHIO
Columbus, Ohio

July 31, 1947

Mr. Goodyear Tire & Rubber Co.
Akron, Ohio

Jos. E. Finley, Supt.
Div. of Safety & Hygiene
Columbus, Ohio

On July 21 and 22 visits were made to the above named company to check conditions under which a claimant, Carl Miles, had worked.

Contact was made with C.M. Miller, Manager of the Compensation Division, and J.T. Kinney, Safety Director.

The company manufactures automobile tires. The Department under investigation was 152-F in which, among other things, tire molds are cleaned.

At the present time tire molds are cleaned by two methods, viz., limestone blasting and by means of an oxygen-gas torch.

Dust Samples:

a. A dust sample was taken for a period of 8 minutes at the breathing zone of an employee cleaning tire molds by means of a limestone blast. The mold was completely enclosed and the abrasive blast was directed through an opening approximately 9"x12". Air was flowing through this opening at the rate of 3000 feet per minute. No dust was observed to be escaping. The sample contained 1.2 million particles of dust per cubic foot of air.

b. It was explained that the dustiest operation occurred in the bagging of limestone dust which had been used and had been collected in a dust arrestor. Accordingly a sample was taken in the breathing zone of an employee bagging this dust for re-use. The sample contained 17.8 million particles of dust per cubic foot of air.

c. Another sample was taken for a period of 13 minutes in the breathing zone of an employee cleaning a tire mold by means of an oxy-natural gas flame and then brushing the mold with steel wool and a wire brush. A 12 inch exhaust duct which removed air at a high rate of velocity extended to the rim of the tire mold. When the flame was used particles of incandescent material was blown from the mold with the flame. Eight minutes of the time was consumed in burning and five minutes in brushing. The sample contained 4.1 million particles of dust per cubic foot of air.

d. It was explained that certain types of molds in which there were deep grooves caused a back lash of abrasive dust in the opening through which the abrasive blast was directed. Such a mold, which is known as a S.L.R.Y type mold, was obtained and cleaned. A sample taken in the breathing zone of an employee doing this type of work contained 49.4 million particles of dust per cubic foot of air.

A sample of the limestone dust obtained from the dust collector was viewed under the petrographic microscope. No free silica was visible. A sample of this dust is being sent to Saranac Laboratory for X-Ray diffraction analysis.

Prior to 1921 sand was used as an abrasive for the cleaning of tire molds. The equipment used is still in the plant and is similar to that used for limestone blasting. The air velocity on this piece of equipment was found to be 3000 f.p.m.

No recommendations are made at this time.

It was a pleasure to visit this plant and the cooperation extended by management is greatly appreciated.

Respectfully submitted,

D. DeWitt Zeffman
Safety Advisor

DDZ:JP

15