FILE NAME: Goodyear (GY)

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DIVISION OF SAFETY AND HYGIENE
THE INDUSTRIAL COMMISSION OF OHIO

October 27, 1964

The Goodyear Tire & Rubber Company
PLANT 1, DEPARTMENT 137-A, CEMENT DEPARTMENT
Akron, Ohio

1) On September 16, 1964 a visit was made to check health hazards at the request of the Union. The Management also concurred in the request.

2) Contact was made with Robert Manning, Safety Director; Charles Beckelman, Department Foreman; J. L. Shifferlett, Fire Prevention Engineer; T. J. Hensley, Chairman, Union Safety Committee; H. L. Bamford, Vice Chairman, Union Safety Committee; and W. L. Wadworth, Secretary, Union Safety Committee.

3) The company manufactures rubber cement from various rubbers and from the following solutions:

MEK - (Methyl ethyl ketone)	200 ppm*
Toluol	200 ppm
Naphtha	500 ppm
Hexane	500 ppm

*ppm (parts per million) threshold limit value.

4) The first floor of the mixing department is approximately 100' x 50' x 11' to the ceiling. There were numerous mixers, mostly of the 'bread-type', many of which were operating at the time of this visit. Most of them were covered by a lid, but by observing closely, vapors could be observed escaping, as indicated by the wavering of the light. In addition, one employee was observed letting liquid flow through the air approximately four feet into an open container. The pipe and pail were not grounded together. There was also a bad leak noted in one of the lines and the liquid was dripping to the floor.

5) Mr. James Yee of the Department of Health made a survey of this department on December 7, 1962 and reported that there were 28.5 air changes per hour in the room. Fans along the east side of the room provided an abundance of air changes at the time of this visit.

6) The following test were made at the time of this visit, using a David Vapo-Tester:

LOCATION:	PPM
FIRST FLOOR:	
East Aisle - side near fan	700-900
Center Aisle	700-1600
West Aisle	100-1300
SECOND FLOOR:	
Center Aisle	0-150

54

The Goodyear Tire & Rubber Co.
Plant 1, Department 37-5,
Cement Department
10/27/64 (2)

The curve used in determining vapor concentrations were those given for benzene; had the curve for toluol or methyl ethyl ketone been used, the results reported would be somewhat higher. The values reported are the combined concentrations of all the solvents.

7) These results may be compared with those obtained by Mr. Yee. In one test he obtained 608 ppm of MEK; all other tests were below that. His tests were taken in the wintertime when the rate of evaporation was less. It is probable that more mixers were being operated at the time of this visit. In accordance with his suggestions, the company has relocated mixer 7-L to the east wall near a fan, where the fan can exhaust the vapors.

8) It will be observed that the TLV is exceeded in many of the locations.

9) It is recommended that:

a. The company enclose and exhaust mixers or replace them by modern equipment.

b. More general ventilation be provided.

c. Grounding be provided when pouring solvent.

d. Leaks be repaired promptly.

DeWitt Hurtman,
Assistant Chief,
Engineering and Hygiene

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