



Inter Office

Personnel and Organization Staff

November 8, 1973

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Division Safety Engineer
Chassis Division

cc J. W. Amesser
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Subject: Evaluation of Asbestos Exposure - Receiving Inspection Area -
Sterling Axle Plant

On October 12, 1973 we evaluated the brake drum repair operation to determine compliance with the OSHA asbestos standards (Ref: Federal Register of October 18, 1972, pages 22142 - 22144, Section 1910.93a, "Asbestos": Sampling and analyses were performed in accordance with standard OSHA procedures.

A review of the results as shown on the attached data sheet indicates that the samples taken at this operation were below the current OSHA Threshold Limit Value (TLV) of five fibers greater than 5 microns in length per cubic centimeter of air and the July 1, 1970 standard of two fibers greater than five microns in length per cubic centimeter of air. It should be noted that these TLV's apply to an eight hour time weighted average. We feel that this operation is considered an intermittent operation and thus subject to the ceiling standard of ten fibers greater than five microns per cubic centimeter of air.

It is our understanding that between 20 and 50 brakes are sanded per week; each brake taking less than one minute.

Discussion

We took one breathing zone sample on the operator while he sanded 24 brakes in succession. A general air sample was also taken on the table at one foot away from the sanding operation and a second general air sample was taken on a pallet 15 feet from the operation. It was noted that the sanding operation is generally not done in succession as with our sample, but rather the sanding is performed after each brake is repaired.

Comments and Recommendations

- We were informed that the asbestos dust from the brakes is not cleaned up after each sanding operation. The dust is allowed to accumulate for about one week. This dust is then swept from the bench to the floor and cleaned up with the other dust in the area. No provision is made for separate disposal.

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We recommend that a small enclosure be placed on the bench such that the brush can be sealed inside it. Thus, the asbestos dust will be confined inside this enclosure. The dust should then be vacuumed on a periodic basis and disposed of in accordance with the OSHA asbestos standard. Attached is a report on a Sears Shop Vacuum Cleaner our Section prepared for General Services Division. The report also gives suggestions on disposal of the asbestos dust.

- Follow-up monitoring will be conducted in March of 1974.

Norman Brock
Industrial Hygienist
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Attachment

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October 22, 1976

Index Sheet

Index Sheet Section

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Index

Index Sheet Section Index Sheet (1976)
NYH Hierarchy July 1, 1976
Caching Index

- Index sheeting - breathing zone - J. B. Hierarchy, Jr., 20 1976
(20 minute sample)
- On bench 1 sheet away from sampling operation - general air
(10 minute sample)
- On pulley 15 feet from operation - general air (15 minute sample)

Documentation: MEA Model G portable pump @ 2 liters per minute -
Millipore Type AA membrane filter

Analysis: 1976 Phase contrast microscopy by Battering Laboratory, University of Cincinnati, Cincinnati, Ohio

Concentration of Fibers Greater
than 5 fibers in length per
cubic centimeter of air

3
2
20
1.3
1.0
1.6

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