

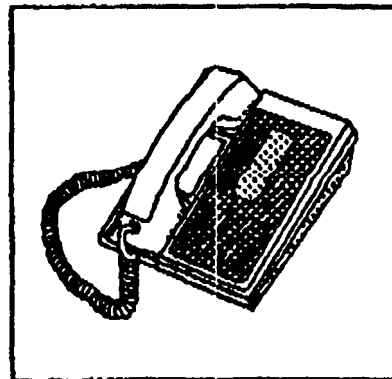
FILE NAME: Allied Signal Bendix (ASB)

DATE: 1966 Apr 14

DOC#: ASB208

DOCUMENT DESCRIPTION: Plant Visit Report

Occupational Health Clinic
for Ontario Workers/Windsor
547 Victoria Avenue
Windsor, Ontario
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**FAX TRANSMISSION SHEET****FAX 973-1906**TO: Barry CastlemanFROM: Lucie DunnDATE: Jan. 6/93NUMBER OF PAGES (INCLUDING THIS COVER SHEET): 4

IF YOU DO NOT RECEIVE THE COMPLETE NUMBER OF PAGES, CALL 973-4800.

MESSAGE: As per our telephone conversation
yesterday, find attached Industrial Hygiene
Report re Bendix, Prince Rd. Plant.

DEPARTMENT OF HEALTH
INDUSTRIAL HYGIENE BRANCHPlant Visit Report

Memorandum to:
Dr. R. B. Sutherland,
Director

Date: April 14, 1966

From: H.M. Nelson

Plant: Bendix-Eclipse of Canada Limited,
Address: 945 Prince Road, Windsor, Ont.
No. Employees: M.- F.-
Total
Hazard: Asbestos dust

Requested by: Mr. A.E. Riebel, I.S.B.
Accompanied by: Mr. A.E. Riebel, I.S.B.
Mr. G. Blackwell, I.S.B.
Date of Visit: March 23, 1966.
Contacts: Mr. E.A. Clifton,
Superintendent.
Mr. G. Spence

Company to be notified by:
Ring forward: Take no action:
Copies to: Dr. E. Mastromatteo
Mr. J. Nelson (2)
Mr. D.E. Moore

INDUSTRIAL HYGIENE BRANCH

APR 15 1966

ROOM 5406 - EAST BLOCK

The above mentioned company manufactures automobile brake assemblies. This includes mounting of brake lining to brake shoes, requiring grinding or sanding of the lining. If the linings are rivetted to the shoes then drilling of the lining is also required.

The drilling and grinding is carried out in a room about 75 ft x 30 ft x 30 ft. There are three large grinding wheels about 24 in. diameter and one about 16 in. diameter in operation. Each of these units are connected to a separate exhaust system handling about 2,000 cfm with capture velocities ranging from 200-1,600 fpm. The exhaust system for the small wheel was also connected to two drilling operations, but apparently these were not considered necessary and had been blanked off. Each exhaust system was connected to its own bag collector located in the room with the discharge air directed to the outside.

The filter bags are shaken about four times a shift by hand. While this is being done the fans are shut off and considerable dust escapes from the collector and tends to settle out on hoppers and other equipment in the room. Employees have expressed concern over the dust in the room.

Comments

1. The exhaust systems seem adequate. During operations the air was clear with very little observable dust. What dust was visible appeared to be that regenerated from settled dust.

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2. Housekeeping is only fair with no attempt to keep dust collectors and machines free of settled dust.
3. Bag shaking is done during break periods so that only the maintenance operator is in the room. The operator does not wear a respirator for the job. The man shaking the bags during the visit, had a badly marked face such that a respirator could not be effectively fitted to him.
4. When the collector hopper is filled with dust, it is removed from the unit for disposal of the dust, and an empty hopper put in place. Apparently this happens not more than once a week.
5. No x-rays of exposed persons are done by our unit.

Power brake assemblies are vapour degreased using methylene chloride in the degreaser. They immediately go to an automatic spray paint booth and are given a black finish. Total openings of the booth are 18 sq ft with average face velocity of 200 fpm for 3,600 cfm total exhaust. Three spray guns are used in the booth. One is pointed in such a way that considerable spray escapes from the entrance side of the booth.

In another location plates for mounting brake assemblies are fitted with mounting lugs and pressure welded using induction heating. Up to four welding units are used. The plates then pass to a trichloroethylene degreaser, a paint dip tank and to a bake oven. The line is U-shaped with the degreaser, paint dip and oven on one side and the welding units on the other side. Thus the degreaser is only about 5 or 6 feet from the nearest welding unit and not more than about 15 ft from the furthest. The degreasing unit is "home-made", fairly efficient, but deteriorating badly. It is not provided with local exhaust. The paint dip tank and oven are effectively exhausted.

Comments

1. The first degreaser unit should present no health hazard. The solvent boils at a low temperature so that degreasing should be fast and vapours more easily controlled than with trichloroethylene. The vapours are less toxic than trichloroethylene, and there is good general ventilation provided by the paint spray booth.
2. The second degreaser unit discussed would seem to present a definite hazard. The vapour section is badly corroded making it liable to leakage of vapours. There is a possibility of phosgene being formed because of the nearness of heat sources.

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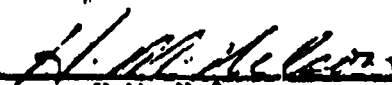
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Directions to be issued

1. Collector bags in the brake lining shop shall be shaken with only the maintenance operator present.
2. The operator shall wear a suitable approved respirator for shaking the bags.
3. Housekeeping shall be improved in the brake lining shop. All settled dust shall be removed by vacuuming or wet cleaning. No dry sweeping shall be permitted.
4. The vapour degreaser at the brake plate assembly line shall be put in a suitable state of repair or replaced with an acceptable unit.
5. The vapour degreaser shall be located at least 50 ft from a hot operation or fitted with an adequate local exhaust system to remove any solvent vapours escaping from the degreaser or evaporating from parts leaving the degreaser.

Recommendations

1. Operators working with asbestos should be placed under medical supervision, including periodic x-rays by the Industrial Hygiene Branch, Occupational Chest Unit.
2. Where the respirator is directed above, it must be considered that not all people can be fitted with a respirator. I would put the operator on the day of the visit in this category.
3. An alternative to vapour degreasing, such as caustic cleaning, would be preferable. If it were employed then directions 4 and 5 could be disregarded.
4. Some baffling should be provided to prevent the escape of paint spray from the power brake spray booth.


H.M. Nelson,
Engineering Unit,
Industrial Hygiene Branch.

H.N:jej