



The Industrial Commission
Of Ohio
Division Of Safety & Hygiene
246 N. High St. Col. O. 43215

June 7, 1984

Legal Section
The Industrial Commission of Ohio
246 North High Street
Columbus, Ohio 43215

Re: Claim OD #815042-22
Thelma Zemko
Packard Electric
Division - GMC
Warren, Ohio

Attn: Judy Spencer

Dear Ms. Spencer:

As per your request, this report has been prepared based on the information obtained from the facsimile file which you have provided. Also, on March 30, 1984, a visit was made to the offices of Packard Electric Division of GMC located in Warren, Ohio. Packard Electric employs approximately several thousand people in the manufacture of electrical wiring components for General Motors automobiles.

The claimant, who has been employed by Packard Electric for approximately 22 years, alleges that her condition, which has been diagnosed as cerebellar atrophy, has been caused by exposure to trichloroethylene which she used over the time period 1976 to 1981 to clean parts and wiring in the inspection department.

According to company records, the claimant's work history with the Packard Electric Division - GMC since 1976 is as follows:

From 1976 to May 15, 1979, the claimant worked in Department 1170, a Quality Control Inspection Department, which was an enclosed and air conditioned room located adjacent to Department 1129. Department 1170 did visual inspections, temperature chamber tests and electrical function tests on printed circuit boards which were manufactured in Department 1129. It is believed that Ms. Zemko operated a computer which performed the electrical function tests in Department 1170. A vapor degreasing line, which is no longer in existence, was present in Department 1129. The degreaser was used to clean printed circuit boards after passing through a wave soldering line and prior to entering Department 1170.

Local exhaust ventilation existed for the vapor degreaser and a "chilled layer" was used to cover the solvent in order to keep vapors from escaping. According to Mr. Bruce Black, Industrial Hygiene Engineer, and Mr. Emmett Innskeep, Supervisor of Worker's Compensation, as well as foremen at Packard Electric, trichloroethylene was not used in Department 1170 or Department 1129. It is believed that trichloroethane (in particular, 1,1,1-trichloroethane) was used on the vapor degreasing line and that the claimant, as an inspector, would occasionally use a small amount of trichloroethane to clean the printed circuit boards. The company has no industrial hygiene air sampling data available for possible exposures to trichloroethane inside Department 1170. However, according to a memo dated August 30, 1983, a copy of which is attached to this report, Mr. Black obtained air samples on June 1, 1978, for trichloroethane in Department 1129. His results indicated 60-75 ppm in the air at the degreaser outlet. The American Conference of Governmental Industrial Hygienists suggests a time-weighted average threshold limit value of 350 ppm for 1,1,1-trichloroethane.

On approximately May 15, 1979, the claimant transferred into Department 975 performing Inspection/Sample Testing duties. This would include inspecting, gauging, and performing electrical tests on diodes to make sure that they met required specifications. The claimant, who worked in Department 975 until her retirement on March 1, 1982, and one other person worked as Inspectors/Sample Testers in Department 975. Department 975 is an air conditioned room, and according to the foreman and the employee in this area, trichloroethylene was not used in Department 975. Several small solder baths exist in Department 975, into which the diodes and capacitors are dipped after first being dipped into a flux (for approximately five seconds). Also, a small amount (approximately one small squeeze bottle) of denatured alcohol is used occasionally by the employees in Department 975 to clean parts. It was indicated that the foreman in Department 975 could occasionally ask this claimant to work other jobs such as inspection on plating lines and coil line inspection in this department.

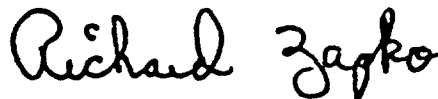
In summary, according to information provided by the company, the claimant has worked in Department 1170 from 1976 until May 15, 1979, at which time she then worked in Department 975 until her retirement on March 1, 1982. Company representatives, foremen and employees of Packard Electric indicate that neither trichloroethylene nor trichloroethane was ever used in Department 975, and that

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trichloroethylene was never used in Department 1170. It was indicated that trichloroethane was used occasionally by the claimant to clean printed circuit boards in Department 1170, and that trichloroethane was used in a vapor degreasing operation located in Department 1129 which was adjacent to Department 1170.

Threshold Limit Values refer to airborne concentrations of substances and represent conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect. Because of wide variations in individual susceptibility, however, a small percentage of workers may experience discomfort from some substances at concentrations at or below the threshold limit; a smaller percentage may be affected more seriously by aggravation of a pre-existing condition or by development of an occupational illness.

Sincerely,



Richard Zapko
Industrial Hygienist

RZ/thn

CERTIFICATE OF AUTHENTICITY

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William D. Hays
Supervisor, Microfilming Unit

By: John Frey
(Camera Operator)

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