

BWC

BUREAU OF
WORKERS' COMPENSATION

Division of Safety & Hygiene, Oliver R. Ocasek Government Office Bldg.
Room 403, 161 South High Street, Akron, Ohio 44308

PLAINTIFF'S
EXHIBIT
BRK-130

Phone: (216) 379-3370

February 1, 1991

Legal Section
The Industrial Commission of Ohio
30 W. Spring Street, 9th Floor
Columbus, Ohio 43266-0581

Attn: Judy Spencer

RE: OD39698-22
Carl D. Ambrose
~~General Motors Assembly~~
Warren, Ohio 44482

Dear Ms. Spencer:

At your request, this report has been prepared based upon information which you have provided in the facsimile file, and from additional information provided by union and management representatives during a January 9, 1991 visit to the General Motors Automobile Assembly Plant, located in Lordstown, Ohio. Contacted at the plant during this visit were the following individuals:

Mr. Carmen Pompeii - Safety Director
Ms. Paula Robsel - Safety Engineer
Mr. Robert Walter - Union Health & Safety Representative

This claimant, on his application for an occupation disease claim, describes his condition as "chemical induced mild obstructive airway disease", with the date of diagnosis given as "January 1989", the same date he states symptoms first appeared. An O-D-42 form in the file indicates that Dr. T. Morrow diagnosed the described condition on January 23, 1989. Although not mentioned on the O.D. claim application, which was dated March 21, 1990, a C-30 form in the file, also from Dr. Morrow, indicates that in addition to obstructive airway disease, on November 11, 1989, the claimant was diagnosed as having upper airway sensitivity. Although this claimant apparently has never been a smoker, it should be noted that information provided in the file indicates a family history of hypersensitivity respiratory disease (his mother had asthma) and the claimant's own personal medical history of chronic sinusitis, environmental allergies, and possible asthma. This information is provided in admission notes from Trumbull Memorial Hospital, dated November 11, 1989 and in a letter from Dr. Kretchemer, Akron Pulmonary

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Associates, dated June 22, 1990.

In his summary of his employment history with General Motors, the claimant states that he was hired in September 1977, and has held various jobs over the years. Including assembler, inspector, quality control, repairman and specifications monitor. From information provided during the January 9, 1991 visit, the claimant began working in the monitoring area (inspector) in the paint department on May 11, 1987. On September 18, 1989 he was transferred to an alcohol wipe-off job inside a ventilated booth in the paint department. He remained on this job until January 16, 1990, when he apparently was referred to a job bank for retraining.

Regarding the possibility of exposures to solvent vapors in the monitoring area, it should be noted that this well ventilated area is totally remote from spray painting, all of which is carried out in enclosed ventilated booths. During the January 9, 1991 visit to this department, with normal operations, there was no detectable solvent odor noted. Personal air evaluations, conducted in the monitoring area by management and union representatives has never indicated the presence of excessive levels of air contaminants. Considering the observed conditions and reported results of air sampling in the monitoring area of the paint department, it is highly unlikely that excessive exposures are possible in this area.

During the period of time when the claimant was assigned alcohol wipe-off duties there is a possibility that he may have been exposed to unknown concentrations of isopropyl alcohol. Although no testing was ever carried out at the ventilated booth where the claimant worked, air monitoring for isopropyl alcohol was performed at a similar unvented operation where isopropyl alcohol was being used. The results of monitoring at the unvented booth indicated a TWA concentration of 94 ppm, approximately one-fourth of the TWA exposure limit of 400 ppm which has been adopted by OSHA and the ACGIH. With better ventilation available, exposures at the booth where the claimant worked should be somewhat less than those monitored in the unvented area. From these results, although the claimant may have experienced some exposure to isopropyl alcohol, it is likely that the concentration he experienced were well within acceptable levels.

Regarding the health effects of isopropyl alcohol, it is interesting to note that the NIOSH/OSHA Occupation Health Guidelines for Chemical Hazards (NIOSH Publication No. 81-123), it is stated that "in persons with impaired pulmonary function, especially these with obstructive airway disease, the breathing of isopropyl alcohol might cause exacerbation of symptoms due to its irritant properties." The claimant was diagnosed as having "mild obstructive airway disease" on January 23, 1989, approximately eight months prior to the date he began to work at the alcohol wipe-off job. From the ACGIH Documentation of TLVs,

a time weighted average exposure (TWA) to 400 ppm of isopropyl alcohol should, at most, provide only mild irritation of the upper respiratory passages. Concentrations at the alcohol wipe-off job, based on air sampling results at a similar operation, should be well below this value (400 ppm), which has been adopted by both OSHA and the ACGIH as their (TWA) exposure limit.

If, as is indicated by his medical history, this claimant has a propensity to experience hypersensitivity diseases, he may be experiencing allergic type reactions to materials in the workplace, even though concentrations are below normally acceptable exposure levels. Although this individual, during his employments at General Motors, was probably not regularly overexposed to any particular air contaminant, having worked in or near areas where organic solvents are used, he may have had contact with low concentrations of these materials. If he is atopic, having a genetic tendency toward allergies, there is a possibility of hypersensitivity to substances which may be used in areas where he has worked.

If, in fact, this individual is experiencing a hypersensitive reaction to some substance in the workplace, it is likely that the symptoms will occur upon any contact with the causative agent or agents, even at concentrations which are well within the limits which have been established by OSHA and the American Conference of Governmental Industrial Hygienists (ACGIH). Once an individual has become sensitized to some substance in the workplace, to avoid future reaction, they should consider moving to another department or changing their occupation, if possible.

"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 variation 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." (Threshold Limit Values for Chemical Substances in the Work Environment Adopted by ACGIH with Intended Changes for 1989-90, p. 3.)

Sincerely,

Donald B. Meeker

Donald B. Meeker
Industrial Hygienist

DBM/klg