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IN SAFETY AND HEALTH

April 15, 1986

Ms. Judy Spencer
Legal Department
Industrial Commission of Ohio
246 North High Street
Columbus, Ohio 43215

RE: OD 24348-22
Ollie Newton
Chevrolet-Parma Plant
General Motors
Corporation
Parma, Ohio

Dear Ms. Spencer:

On February 25, 1986, an industrial hygiene investigation was conducted at the Chevrolet-Parma Plant to evaluate Mr. Ollie Newton's claim of occupationally induced chronic obstructive airways disease. This investigator worked with the legal firm of Baughman and Associates Co., L.P.A., which is representing the employer, Chevrolet Parma. A number of attempts were made to meet with a representative of Baughman and Associates at the Chevrolet-Parma plant prior to the February 25, 1986, survey date. At the plant this investigator met with Mr. Bill Sharkey and Ms. Jane Wilson.

The Pressed Metal, Transmission, and Prop Shaft plants make up the Chevrolet-Parma complex. Automatic transmission for rear wheel drive cars are made in the Transmission plant, drive shafts are made in the Prop Shaft plant, and sheet metal parts are made in the Pressed Metal plant. Thousands of employees work at these plants. The claimant worked in both the Transmission and Prop Shaft plants.

Company records indicate that Mr. Newton worked approximately 33 years at the Chevrolet-Parma Plant. A copy of his employment record is supplied with this report. There are no more job description records available for his work history prior to 1968 other than that on the employment record. During those years his main job classifications were Machine Operator General, Machine Operator Special, and Machine Operator Precision Grinder. This investigator was told that precision grinding probably would have been done on an automatically fed machine with a wet

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grinding wheel. The operator of a machine of this type would not be doing hand grinding on a dry wheel. A review of the Division of Safety and Hygiene's files revealed a March 4, 1971, report of a claim investigation done at Chevrolet-Parma. This claimant had worked as a Machine Operator from 1953 through 1969. Excerpts from the report are as follows:

"It was stated that the grinding operations were done with a liquid coolant, with the exception of 2 or 3 days on one dry grinding operation. The grinding and drilling machines were hooded and provided with ducts to an exhaust system. There was no evidence of dust reaching the operator in any of these operations. There is no silica involved in any of the grinding or cutting processes."

"Since there was no dry grinding or any other apparent source of dust in the air, taking a dust count was not indicated."

It is not known how well these statements correlate with this investigation. From 1968 through 1975 Mr. Newton was in a number of job classifications. From 1976 through 1985 Mr. Newton worked mainly in two departments, one in the Transmission Plant and the other in the Prop Shaft Plant.

From 1976 through 1979 Mr. Newton was a job setter in Department 25 of the Transmission Plant. Upon speaking with his supervisor this investigator was told that Mr. Newton was a job setter on the Scan air tester machines. He was responsible for keeping the machines in operation. The Scan air testers use air pressure to test finished transmission housings for leaks. The claimant would replace seals if necessary and work on the machines if the transmissions are not lining up properly.

The Scan air tester machines do not appear to be a source of significant airborne contamination to the operator or job setter. During the limited amount of time that this investigator spent in the area of the Scan air tester little or no airborne oil mist or fumes were seen around these machines. Air monitoring was attempted by this investigator but for reasons beyond this investigator's control air monitoring had to be terminated. This investigator was asked by company representatives not to have the samples analyzed and has complied with this request. This investigator was given a copy of a report where the General Motors Corporation's Industrial Hygiene Department conducted air monitoring in Department 25 on January 5, 1983. Sample results for total particulates and oil mist were within acceptable limits. Although air monitoring was conducted in Department 25 an air monitoring result for a job setter on the Scan air tester is not present in this report. A copy of the report is being supplied.

For about five years prior to retirement Mr. Newton worked as a job setter in Department 29 of the Prop Shaft Plant. during this job he was responsible for the operation of the ID grinders. These machines operate automatically and grind out parts used on universal joints to house bearings. These machines use a soluble oil as a coolant which is flooded over the parts being machined. This area is enclosed by a plexiglass shield during operation. A Job Setter is responsible for setting up these machines when they are not in operation. While the machines are running the Job Setter remains in the area observing the operation of the ID grinders. During the limited amount of time this investigator spent around the ID grinders little airborne visual emission was observed. Personal air monitoring was attempted in this area but it had to be terminated prematurely. Again this investigator was asked by company representatives not to have the samples analyzed and has complied with this request. This investigator was given a copy of a report where the General Motor's Corporation's Industrial Hygiene Department conducted air monitoring in Department 29 on January 8, 1985. Samples results for total particulates were within acceptable limits. The sample in Department 29 was an area sample and not a personal sample. A copy of the report is being supplied.

It must be pointed out that these values represent conditions on the date of this survey, and the degree of their applicability to any long-term situation can only be determined by a professional well versed in the practice of industrial hygiene and/or occupational medicine. Use of these data in an effort to establish or eliminate cause-and-effect relationships with regard to disease or illness must be done with extreme caution, and then only by an individual who fully understands the many inherent variables.

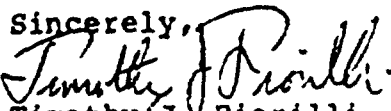
Threshold limit values refer to airborne concentrations of substances and represent conditions under which it is believed that nearly all workers may be repeatedly exposed day-after-day without adverse effect. Because of wide variations in individual susceptibility, however, a small percentage of workers 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.

When concerned with exposures to cutting fluids it is important to mention concern over potential exposure to nitrosamines. Nitrosamines are considered to be human carcinogens. Recent literature indicates that nitrosamine's

major route of entry into the body is through skin absorption.¹ An insert is supplied concerning nitrosamines and the types of cutting fluids that may contain nitrosamines. Additional information concerning oil mist exposure is also being supplied.

Conditions in both Departments 25 and 29 have not changed significantly over the past few years. An employee pre-employment physical is being supplied with his report. Respiratory protection has not been used in either department for the jobs that the claimant did.

In summary Mr. Newton worked approximately 33 years at the Chevrolet Parma Plant. For the latter 10 years of employment at General Motors Mr. Newton worked mainly as a job setter in two department. Although visually airborne contaminants did not appear to be prevalent in these departments Mr. Newton did work in areas where metalworking fluids are used. Company air monitoring results of these areas did not indicate levels above acceptable limits. This investigator attempted to conduct air monitoring on the date of this survey but company representatives requested that sampling be terminated. Based on the limited amount of information this investigator has concerning this claim Mr. Newton appears to have worked around metalworking fluids. he probably had skin contact with these fluids and may have occasionally inhaled airborne mists.

Sincerely,

Timothy J. Fiorilli
Industrial Hygienist

TJF/klp

Inserts:

Copy of Mr. Newton's work history
GMC Industrial Hygiene Surveys
MSDS-soluble oil
JOM article "Antimicrobial Agents for Water-Based
Metalworking Fluids" April 1981
Documentation of TLV-Diethanolamine
JOM article "A Study of Mortality, Symptoms, and
Respiratory Function in Humans Occupationally Exposed to
Oil Mist" July 1970
JOM article "Respiratory Symptoms and Lung Function in Oil

¹David Rounbehler and John Fajen, N-Nitroso Compounds In the Factory Environment (Cincinnati, Ohio, National Institute for Occupational Safety and Health, 1983) pp 41, 64.

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Mist-Exposures Workers" June 1982.
AIHA article "Respiratory response of guinea pigs to oil
mists" August 1979.

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RECORDS CERTIFICATION

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William D. Koye
SUPERVISOR, Microfilming Unit

John Frazee
Name (Camera Operator)

10/27/86
Date

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