BCC F. M. Luckett - Chicago
D. F. Smith - CO

October 14, 1960

Mr. E. Seuss, Engineer
Milwaukee Diecasting Company
4132 North Holton Street
Milwaukee, Wisconsin

Dear Mr. Seuss:

Mr. Arbogast has reported your comments about the evolution of heavy white vapors when molten aluminum spills on die-casting room floors which may be saturated with one or more of the Pydraul fluids.

Our animal toxicity studies with the decomposition products of the Pydrauls confirm the evolution of irritating gases, vapors and mists. Essentially, the decomposition products are made up of hydrochloric acid vapors, carbon monoxide and phenolics. That these decomposition products are obnoxious and toxic to a degree is easily demonstrated. Our animal experiments have shown, however, that a limited exposure to these decomposition products is no more hazardous from a toxicity standpoint than the decomposition products of petroleum base fluids. Further, obnoxious and irritating characteristics of the decomposition products of the fire-resistant fluids serve as a deterrent to exposure of workmen. We consider this a "plus factor" in that workmen will not unknowingly expose themselves to insidious contaminants as might be the case where toxic levels are not significantly discomforting.

It would appear to us also that if molten metal spilled on the floors saturated with the petroleum base fluids, serious fires would result which in themselves would endanger life

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more seriously than the presence of irritating concentrations of contaminants which may make it necessary to vacate workroom areas until ventilation reduces the levels of contaminants to a satisfactory degree.

If I can be of any further assistance, please let me know.

Very truly yours,

Elmer P. Wheeler
Assistant Director
Medical Department

EPW:dh

cc Mr. J. Arbogast
Monsanto Chemical Company
McGraw Hill Building
520 North Michigan Avenue
Chicago 11, Illinois

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