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GM POWERTRAIN

April 14, 1997

Ms. Sue Kaebler-Matlock
Michigan Department of Environmental Quality
Saginaw Bay District Headquarters
Environmental Response Division
503 N. Euclid Avenue
Bay City, MI 48706

RE: General Motors Corporation, Saginaw Malleable Iron facility

Dear Ms. Kaelber-Matlock:

This letter is to provide you, for informational purposes, with a description of certain remediation activities involving polychlorinated biphenyls ("PCBs") which have been completed at the General Motors Corporation Saginaw Malleable Iron ("SMI") plant in Saginaw, Michigan. This information is further to discussions with you during your several visits to the SMI plant in 1996. As described previously, this PCB remediation project involves surface cleaning and other activities at several related rooms or structures of the plant. The project has been conducted concurrently with the larger investigation and remedial action project at the entire facility conducted pursuant to Part 201 of the State of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451. As you are aware, the Michigan Department of Environmental Quality ("MDEQ") is overseeing the on-going Part 201 activities. The PCB remedial actions outlined in this letter were completed by early April 1997.

Physical Description of Furnace Areas

The PCB remedial actions discussed herein were conducted in an area of the plant in which five induction (or melting) furnaces are located. The furnaces are used for melting scrap metal which then becomes incorporated into new parts produced at the foundry. Four of the five furnaces currently are in operation, with the fifth having been permanently shut down and dismantled. The following related components and areas

comprise, in general, these furnace operations: tilt units, furnace pits, and dedicated hydraulic system in an associated control room, a dedicated electrical system (with capacitors and transformers, in separate capacitor and transformer rooms), standby generator rooms, and an overall BUSS tunnel which carries copper electric BUSS bars. A diagram (labeled Fig. 2.1) and further description of these areas are included in the "Melting Department Area Investigation and Remediation Report" ("Remediation Report") enclosed with this letter.

The operation of these systems is as follows. Each furnace is mounted on a hydraulically actuated tilt table that enables the transfer of molten metal from the furnace into an overhead transfer crane. Located on the basement level in front of each furnace is a large collection pit designed to collect spilled molten materials from the furnaces. The pits have concrete floors (which vary in thickness from twelve inches to five feet) and walls. The floor and approximately three feet up on the walls are lined with fire brick.

The hydraulic rooms associated with the furnace units consist of control rooms where a hydraulic reservoir, pumps, controls and other equipment are located. With the exception of hydraulic room Number 2, the floor in each of these room is a steel pan lined with three inches of concrete covered by a steel grate to capture fugitive oils which then drain to a common collection system. The floor in hydraulic room Number 2 is concrete.

In addition to the hydraulic system, a dedicated electrical system exists for each furnace. The layout of each electrical system includes a separate transformer/power supply room and a capacitor room. These rooms are location on the main floor of the plant behind each furnace. Power is routed through the transformer into the capacitor bank and then is delivered to the furnaces via a BUSS duct system. The BUSS duct runs out of the capacitor room down into a service tunnel and then is connected to each furnace.

PCB Sources

The areas under consideration in this report first began operating in approximately the 1970 to 1975 time period. For a short period of time (until the mid-1970s) following

commencement of operation, the hydraulic systems for these furnaces apparently used hydraulic oils that contained PCBs. Beginning in the mid-1970s, the systems were drained and refilled with non-PCB containing hydraulic oil. The hydraulic oil used in the induction furnace hydraulic systems has been sampled and analyzed approximately one per year since at least 1976. The results of these sampling efforts have consistently shown levels of PCB in the oil to be less than 50 parts per million (ppm) since at least 1976. Therefore, PCB contamination associated with the melting furnace pits and hydraulic rooms is not subject to the Toxic Substances Control Act ("TSCA") PCB regulations.

The capacitor rooms for the furnaces historically contained large PCB capacitors. As of December 1996, all large PCB capacitors in these capacitor rooms were removed and have been replaced with non-PCB capacitors. Only one transformer, in furnace transformer room Number 2, contained PCBs. Available analytical data indicates that the fluid in this transformer contains less than 50 ppm PCBs.

Sample Results

Included in the Remediation Report enclosed with this letter is a copy of analytical results for PCB samples collected from the furnace operation areas. A total of over 850 samples were collected during implementation of these actions.

Remedial Actions and Schedule

Because SMI is an operating facility, and work could not be performed in areas where the furnaces were operating, it was necessary to schedule remediation of the furnace areas sequentially. At this time, all of the melting furnace areas have been remediated. Initially, the remediation approach used for this project was to repeatedly bulk clean, sample, scarify and then resample the affected floor areas until further scarification did not result in any incremental PCB level reductions. Subsequently, the decision was made to completely remove flooring material in some affected areas rather than attempt to successively scarify floors. A flow chart outlining this approach is included in the enclosed Remediation Report.

Conclusion

SMI believes these remedial efforts are consistent with remediation policies under applicable regulatory programs, including, but not limited to, TSCA and applicable State of Michigan requirements. As you are aware, SMI continues to implement an overall Part 201 remedial investigation at this site. If you would like additional information on this project, please contact Megan Shaffner at (517)757-0921.

Very truly yours,

A. J. Scargall
Plant Manager

cc: Toxics Program Section, Wastes, Pesticides and Toxics Division, U. S. Environmental Protection Agency