



gallons per day, the balance being lost in evaporation. The water is utilized in cooling the cupola shells, cupola emission scrubbers, slag sluicing, non-contact machine cooling, and the dust collectors.

Outfall 002 is an industrial wastewater discharge to the Vermilion River and constitutes the principle subject of this Petition. Outfall 003 discharges ground and storm water but is included in the Petition with respect to variance from the manganese limitation. At present the discharge from Outfall 002 is treated with a polymer flocculant in a 12,000,000 gallon settling basin.

The discharge levels of various contaminants for which variance is sought, as indicated by Petition, are as follows:

Table 1

Parameter	GM Actual (mg/l)			Board limit (mg/l)
	High	Low	Avg.	
pH	8.3	7.8	7.3	5-10
SS	355	5.0	56.6	15.0
iron	17.9	0.6	3.8	1.0
lead	2.1	0.15	0.9	0.1
manganese	2.06	0.3	0.9	1.0
mercury	-	0.0005	-	0.0005
zinc	10.6	0.93	4.1	1.0
O&G	75.1	5.0	11.9	15.0

In February, 1976 GM retained Dr. James Etzel of Purdue University with regard to litigation concerning GM's NPDES permit. In June, 1976 after several months of sampling, testing, and analyzing, Dr. Etzel determined among other things that by the use of a particular technology in construction of a new treatment facility, GM might comply with the limits in question. On the basis of this report GM commenced preparation of the instant petition for variance to allow sufficient time for design and construction of the new treatment facility. In addition, GM engaged a consulting engineering company to design a wastewater treatment facility that would implement Dr. Etzel's recommendations. At this point in time preparation of preliminary design specifications for the treatment facility has been completed.

GM's latest amendment to its Petition filed May 6, 1977 includes a refined version of the original proposal with a proposed completion of the facility by September 1, 1978. The proposed system will treat the full 10,000,000 gallons per day discharge at Outfall 002 with physical treatment including flash mixing with NaOH, alum, and polymer, followed by flocculation and settling in the existing lagoon. The effluent will then be pumped through filters and a cooling tower before final discharge to the River.

In its Amended Recommendation of May 6, 1977, the Agency proposes that GM be granted variance under the conditions and compliance schedule indicated in the May 6, 1977 "Stipulation" presented to the Board by GM and the Agency. Paragraph 5 of this "Stipulation" contains a rather lengthy set of conditions and compliance schedule underlying the proposed variance. The Board finds that denial of the variance would work an arbitrary and unreasonable hardship on GM. Considering GM's good faith attempt to find a method of treatment suitable for its effluent, and weighing the potential environmental harm caused by GM's current discharge parameters as indicated in Table 1, against the hardship that would be imposed upon GM if the variance were denied, the Board will grant GM the proposed variance until September 1, 1978 under the conditions and compliance program contained in paragraph 5 of the "Stipulation".

This Opinion constitutes the findings of facts and conclusions of law of the Board in this matter.

#### ORDER

It is the Order of the Pollution Control Board that General Motors Corporation be granted variance until September 1, 1978 for their Central Foundry Division Plant at Danville, Illinois until September 1, 1978 from the provisions of Rule 203(f) of Chapter 3 with regard to iron, lead, zinc, manganese, copper, cadmium, fluoride, and temperature; and from the provisions of Rule 408(a) of Chapter 3 with regard to iron, lead, zinc, manganese, flouride and total suspended solids subject to the following conditions:

1. GM shall fulfill the conditions and compliance schedule as stated in paragraph 5 of the "Stipulation" filed by the Agency and GM on May 6, 1977 which "Stipulation" is hereby incorporated by reference as if fully set forth herein.
2. Within 35 days of the adoption of this Order, the General Motors Corporation shall execute and forward to both the Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706 and the Pollution Control Board a Certification of Acceptance and agreement to be bound to all terms and conditions of this Order. The form of said certification shall be

as follows:

CERTIFICATION

I (We), \_\_\_\_\_ having read and fully understanding the Order of the Illinois Pollution Control Board in PCB 76-205 hereby accept said Order and agree to be bound by all of the terms and conditions thereof.

SIGNED \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 9<sup>th</sup> day of June, 1977 by a vote of 5-0.

Christan L. Moffett  
Christan L. Moffett, Clerk  
Illinois Pollution Control Board