

ILLINOIS POLLUTION CONTROL BOARD  
November 16, 1978

GENERAL MOTORS CORPORATION,	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB 78-228
	)	
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

OPINION AND ORDER OF THE BOARD (by Mr. Werner):

This matter comes before the Board on a Petition for Extension of Variance filed on August 23, 1978 by General Motors Corporation ("General Motors") requesting an extension of its existing variance (PCB 76-205) from the Board's water quality limit for fluoride of Rule 203(f) of Chapter 3: Water Pollution Regulations for outfall 002 at General Motors' Central Foundry Division plant at Danville, Illinois to extend from September 1, 1978 (the expiration date of General Motors' existing variance pertaining to fluoride at outfall 002) through the conclusion of the regulatory proceeding now pending before the Board (R78-7) in connection with fluoride water quality at this outfall. On September 25, 1978, the Illinois Environmental Protection Agency ("Agency") filed its Recommendation. The Agency recommended that the Petition for Extension of Variance be granted for a period of five (5) years or until the Board reaches a final decision in R78-7, whichever occurs first (subject to the condition that the concentration of fluoride at outfall 002 not exceed that which Petitioner has discharged previously). General Motors has waived its right to a hearing, and no hearing has been held.

The subject of this Petition for Extension of Variance is General Motors' foundry in Danville, Vermillion County, Illinois which manufactures malleable and grey iron castings for the automotive industry. The unit processes employed by the foundry include: cupola melting, sand molding, and rough finishing and annealing of castings which are used in the production of intake manifolds, brake parts (master cylinders), transmission parts, and disc brake components for motor vehicles. General Motors' Danville operation produces approximately 1,500 tons per day of iron castings.

In 1977, the average number of employees on General Motors' payroll at Danville was 2,310 people and the total 1977 payroll was \$48 million dollars. General Motors Corporation spent \$71.2 million dollars in 1977 on goods purchased from Danville area suppliers for the Danville plant. Currently, the plant provides employment for more than 2,650 individuals. As indicated by the previously delineated figures, the Danville plant was a substantial factor in the \$520.2 million dollar contribution by General Motors to the economy of the State of Illinois in 1977.

General Motors' Danville plant is located in Vermillion County. The North Fork Vermillion River, and the discharges of the Danville Sanitary District and Lauhoff Grain Company, are located downstream. The plant currently draws approximately 11 million gallons of water per day from the Vermillion River and discharges about 10 million gallons of water per day (the balance being lost in evaporation). The water is utilized in cupola shell cooling, cupola emission cleaning, slag sluicing, non-contact machine cooling and dust collecting.

General Motors' operation has an industrial wastewater discharge at outfall 002 which flows through an unnamed ditch to the Vermillion River. Outfall 002 is one of three permitted industrial wastewater discharges at the Petitioner's Danville property and constitutes the principle subject of this Petition. It is tributary to a ravine and stream which empty into the Vermillion River on the east side of the property. General Motors must currently meet the Board's water quality limit of a maximum concentration of 1.4 milligrams/liter of fluoride at the point of its discharge into the unnamed ditch. However, General Motors cannot comply with the existing 1.4 mg/l fluoride water quality limit, at the point of discharge, when background river levels of fluoride are high.

On June 9, 1977, the Illinois Pollution Control Board granted General Motors Corporation a variance from Rule 203(f) of the Board's Water Pollution Regulations with regard to iron, lead, zinc, manganese, copper, cadmium, fluoride, and temperature (PCB 76-205). The Board also granted a variance from Rule 408(a) of Chapter 3 with regard to iron, lead, zinc, manganese, fluoride and total suspended solids until September 1, 1978.

The Board's Order in PCB 76-205 incorporated the conditions and compliance schedule as stated in the "Stipulation" filed by the Agency and General Motors on May 6, 1977. Paragraph 5, subpart (3) of that Stipulation required that General Motors

forward to the Agency by December 31, 1977, the results of a study concerning the relationship, if any, of General Motors' current and alternative process materials usage, or, if necessary, solid waste storage with fluoride levels at outfall 002. The Agency received the report of that study on December 29, 1977. Paragraph 5, subpart (3) of the "Stipulation" further required that, if the aforementioned report showed noncomplying fluoride levels for 002 at the time of submission of the report to the Agency, General Motors prepare legal or technical solutions for proposal to the Agency by March 1, 1978. Exhibit A of General Motors' petition is a copy of the Petition to Amend Regulations R78-7, filed August 23, 1978 (i.e., on its petition, Petitioner is seeking to amend Rule 203.1 of Chapter 3 as that rule applies to the level of fluoride at outfall 002).

General Motors has requested an extension of its existing Variance from the Board's water quality limit for fluoride at outfall 002 to extend from September 1, 1978 (the expiration date of General Motors' existing variance for this parameter and outfall) through the conclusion of the regulatory proceeding now pending before the Board in R78-7 (i.e., the proposed site-specific amendment to the 1.4 milligram/liter fluoride water quality limit to allow fluoride levels in the ditch of up to 5 milligrams per liter).

In its Recommendation, the Agency indicated that it believed that, considering Petitioner's compliance with the requirements of the previously mentioned Stipulation regarding fluoride, to require General Motors at this time to develop a treatment scheme to remove fluoride from outfall 002 would constitute an arbitrary and unreasonable hardship in light of the regulatory change R78-7 pending before the Board. (Agency Recommendation, p. 3). Thus, the Agency has recommended that the Company's Petition for Extension of Variance be granted for a period of 5 years or until the Board reaches a final decision in R78-7, whichever occurs first - subject to the condition that the concentration of fluoride at outfall 002 not exceed that which General Motors has discharged previously. (Agency Recommendation, p. 3-4).

After carefully evaluating this matter, the Board finds that denial of the extension of this Variance would constitute an arbitrary and unreasonable hardship. It would not be appropriate to require General Motors to develop a treatment scheme to remove fluoride from outfall 002. The pending regulatory change before the Board in R78-7 may also provide permanent relief. Accordingly, the Board will grant the Petitioner an extension of its existing variance (i.e., PCB 76-205, which expired on September 1, 1978) from

the Board's water quality provisions of Rule 203(f) of Chapter 3: Water Pollution Regulations as such rule is applicable to fluoride at outfall 002 at General Motors' Central Foundry Division plant at Danville, Illinois until November 16, 1983 or until the Board reaches a final decision in R78-7, whichever occurs first (subject to the condition that the concentration of fluoride at outfall 002 not exceed that which Petitioner has discharged previously). The Agency shall be required to modify Petitioner's NPDES permit to conform with the Board's Order in this matter.

The Board also directs the Agency to modify General Motors' NPDES permit consistent with this Order pursuant to Rule 914 to include interim effluent limitations as may reasonably be achieved through application of best practicable operation and maintenance practices at the existing facility.

This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

#### ORDER

1. General Motors Corporation is hereby granted an extension of its existing Variance from the Board's water quality provisions of Rule 203(f) of Chapter 3: Water Pollution Regulations as such rule is applicable to fluoride at outfall 002 at General Motors' Central Foundry Division plant at Danville, Illinois until November 16, 1983 or until the Board reaches a final decision in R78-7, whichever occurs first, subject to the condition that the concentration of fluoride at outfall 002 not exceed that which Petitioner has discharged previously.

2. Petitioner, within 30 days of the date of this Order, shall request Agency modification of NPDES permit to incorporate all conditions of the variance set forth herein.

3. The Agency, pursuant to Rule 914 of Chapter 3, shall modify Petitioner's NPDES permit consistent with the conditions set forth in this Order including such interim effluent limitations as may reasonably be achieved through the application of best practicable operation and maintenance practices in the existing facilities.

4. Within forty-five (45) days of the date of this Order, the Petitioner shall submit to the Manager, Variance Section, Division of Water Pollution Control, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois, 62706, an executed Certification of Acceptance and Agreement to be

bound to all terms and conditions of the variance. The forty-five day period herein shall be suspended during any judicial review of this variance pursuant to Section 41 of the Illinois Environmental Protection Act. The form of said certification shall be as follows:

CERTIFICATION

I, (We), \_\_\_\_\_ having read the Order of the Illinois Pollution Control Board in PCB 78-228, understand and accept said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

\_\_\_\_\_  
SIGNED

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
DATE

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 16<sup>th</sup> day of November, 1978 by a vote of 3-0.

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