

ILLINOIS POLLUTION CONTROL BOARD  
November 1, 1973

MONSANTO COMPANY )  
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 )  
 v. ) PCB 73-320  
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 ENVIRONMENTAL PROTECTION AGENCY )  
 )

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

Petition for variance from the mercury effluent limits (Rule 408(a)) was filed on August 6, 1973. No public hearing was held.

On August 23, 1973 the Board issued an order requiring additional information. An amended petition was filed October 9, 1973. No recommendation has been received to date from the Environmental Protection Agency.

In previous proceedings (PCB 71-110, November 8, 1971, 3PCB9 and PCB 73-336, October 31, 1972, 6PCB117) this Board granted variances to Monsanto's Krummrich Plant at Sauget to discharge mercury above the limit of 0.0005 mg/l. The initial variance permitted 0.5 lbs. per day discharge; the succeeding one cut this amount to 0.33 lbs. per day. A materials balance for mercury was also required under PCB 72-336 and this was submitted on April 12, 1973.

The data submitted in the amended petition supplemented by the report for September 1973 shows a six month average of 0.256 lbs. of mercury discharged (April through September, 1973 inclusive). The previous six month figure (October 1972 through March 1973) is 0.315 lbs. of mercury discharged daily. Since the most recent data (June through September, 1973) gave the lowest values recorded in the past 13 months (0.21 lbs. per day) we think that the new variance can be both granted and tightened in its allowance.

We grant the variance for an additional year at 0.25 lbs. per day based upon a six month moving average not to exceed 0.4 lbs. in any 24-hour period. In January 1971 the plant was discharging 7.7 lbs. per day of mercury. The reduction from 7.7 to 0.25 lbs. per day is 96.7% which is an impressive and commendable reduction in just 32 months of effort.

The effluent standard is 0.5 ppb and Monsanto's discharge in September 1973 averaged 2.0 ppb or 150% above the standard. We do not accept the petitioner's statements on the effects of its discharge on the Mississippi River because a mixing zone of 25% is assumed. The petitioner incorrectly quotes Rule 201(b) as permitting this computation but the Rule has not yet been changed. Furthermore Rule 201(a) limits mixing zones to not exceed in area the size of a circle of 600 ft. radius (1,130,000 sq. ft.).

We also call attention to Monsanto's unexplained and possibly significant mercury losses at this plant. Their materials balance estimates daily mercury losses at from 38.395 lbs. per day to 63.455 lbs. per day or 23,100 lbs. per year at the highest daily figure. Monsanto only states "Our measured (mercury) losses do not balance with mercury purchases... We believe the unaccounted for losses are either in the landfill or are lost by theft." But we are not given the purchased quantity of mercury and do not know in this record the "unaccounted for losses."

Monsanto should plan to be in compliance with the mercury standard a year from now. The Board will want to fully explore any reasons as to why compliance after three full years cannot be achieved.

This opinion constitutes the Board's findings of fact and conclusions of law.

ORDER

1. Variance is granted from Rule 408(a) to discharge mercury in excess of 0.0005 mg/l until November 6, 1974. The mercury discharged may not exceed 0.25 lbs. per day based upon a six month moving average and 0.40 lbs. in any 24-hour period.
2. Monsanto shall submit to the Environmental Protection Agency monthly reports on the progress of its mercury abatement program.
3. Monsanto shall submit to the Board and Agency within four (4) months from the date of this opinion an update materials balance for mercury for the chlor-alkali plant giving the losses and the purchases and the unaccounted for amounts.

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 15+ day of November, 1973 by a vote of 5-0.

*Christan L. Moffett*  
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Clerk