

ILLINOIS POLLUTION CONTROL BOARD

December 19, 1974

ABBOTT LABORATORIES)
PETITIONER)
)
)
v.) PCB 74-338
)
)
ENVIRONMENTAL PROTECTION AGENCY)
RESPONDENT)

MR. RONALD L. SCHERUBEL, ATTORNEY, in behalf of ABBOTT LABORATORIES
MR. JOHN T. BERNBOM, ATTORNEY, in behalf of the ENVIRONMENTAL PRO-
TECTION AGENCY

OPINION AND ORDER OF THE BOARD (by Mr. Marder)

This action involves a Petition for Variance, filed by Abbott Laboratories on September 19, 1974, in order to discharge effluent from its North Chicago treatment plant, in excess of the standard set in Rule 404 (d) of Chapter 3, Water Pollution Control Regulations. The standard in Rule 404 (d) is 4 mg/l BOD and 5 mg/l suspended solids. Variance is requested until late 1975, when Petitioner will divert its entire flow to the new Gurnee treatment plant of the North Shore Sanitary District.

The Agency filed its Recommendation on October 24, 1974. In the Recommendation the Agency suggests variance be granted, subject to certain conditions.

Hearing was held in North Chicago, Lake County, Illinois, on October 31, 1974. Members of the public were present.

Abbott Laboratories is a world-wide manufacturer of pharmaceuticals, with its largest facility in North Chicago. The plant turns out a wide range of drugs and consumer products and employs almost 6000 persons.

The Petitioner maintains an activated sludge treatment plant for treatment of process waste water in the plant. Seventy-five percent of the waste water in the plant is recycled for reuse, whereas 25% of the water is treated for discharge. Discharge is to Lake Michigan at about 700,000 gallons per day.

In 1972 Abbott was considering ways of bringing its effluent into compliance with Rule 404 (d) by December 31, 1974. Two plans were considered. The first was to upgrade the treatment plant, so that the discharge would meet the Lake Michigan standards. Pilot plant work was done to determine how this could be done. The second plan was to divert the entire flow from Abbott to the North Shore Sanitary District plant in Gurnee, Illinois.

Abbott chose the second plan. Going to Gurnee would involve less cost for Abbott over the long run (even though Abbott would pay a share of capital and operating costs as related to its contribution) because of economies of scale in plant construction and operation. Further, Abbott felt it would be a better policy to end its discharge to the lake completely.

In 1972 the Agency accepted the diversion to Gurnee as an acceptable compliance plan (Exhibit 1 attached to Petition).

All would have been well had the Gurnee plant proceeded on schedule and been completed in December 1974. Through no fault of Abbott's, the Gurnee plant is now scheduled to have secondary treatment by September of 1975 and tertiary treatment by August of 1976.

Hardship:

Abbott alleges, and the Agency agrees, that it would be an unreasonable hardship for Abbott to spend the time and money to upgrade its plant to handle these discharges when the Gurnee plant will be on line in less than one year. The Board agrees and notes that even if Abbott were to start work today to upgrade the plant, it probably would not be in operation by the time the Gurnee plant was ready to receive the effluent.

Environmental Impact:

It is noted in the Petition and confirmed in the Agency's Recommendation, that other than BOD and suspended solids the Abbott effluent complies with all the other criteria in Rule 408 (a). It is noted in the record that part of the problem with maintaining the suspended solids criteria is that at times the intake water to the plant from the lake is higher than the effluent standard (R. 29-30). The BOD discharge will have a minimal impact on the lake. Also, it appears better for the lake to end the discharge completely, as is contemplated by diverting the effluent to Gurnee. Effluent discharges for a recent six-months period are as follows:

Date	BOD	SS
March 1974	15	25
April 1974	47	75
May 1974	25	15
June 1974	31	18
July 1974	22	14
August 1974	17	9

(Agency Rec. Pg. 2)

The only controversy in this matter relates to conditions the Agency wants placed on the grant of this variance. One condition relates to the maximum discharge of BOD and suspended solids during the term of the variance. The Agency feels that the limit should be BOD, 17 mg/l, and suspended solids, 25 mg/l. This falls into the average that the

plant has had over the past 26 months (R. 27). Abbott feels that there should be no standard for two reasons. First, they feel that the plant, for reasons of design characteristics and load constituents, cannot always guarantee a 17/25 BOD/SS effluent. Abbott states that though the plant average over 26 months was 17/25 BOD/SS, there were days when the effluent was higher and days when it was lower (R. 27). This is remedied by the Agency's recommendation that the effluent levels be averaged over a 30-day period with no more than 5% of the samples greater than 2.5 times the levels in question. Abbott's second point is that the Agency's recommended levels are more restrictive than the levels in Abbott's NPDES permit, issued by the U.S. Environmental Protection Agency. These levels are set in the permit at 20 mg/l BOD and 25 mg/l suspended solids (R. 23). Though we are not bound by the federal permit, we feel it would be unfair for Abbott to have to worry about meeting two rather close standards. Therefore, we will order Abbott to maintain an effluent of 20 mg/l BOD and 25 mg/l suspended solids. Abbott is asking the U.S. Environmental Protection Agency to drop these standards from the NPDES permit. Should such standards be removed, the Board still feels for the purpose of this variance that standards are necessary for its discharge.

The second point raised relates to when Abbott must divert to the Gurnee plant. The Agency wants diversion within 30 days of the date the plant is completed for secondary treatment. Abbott suggests that in that time, the Sanitary District may not authorize Abbott to divert the flow, for reasons beyond Abbott's control. We agree. Abbott should not be put in jeopardy of our Order because of actions by a third party out of Abbott's control. Therefore, we will order Abbott to divert to Gurnee within 30 days of receiving notice to do so by the North Shore Sanitary District, but no later than 90 days after the completion of the treatment plant.

This Opinion constitutes the findings of fact and conclusions of law of the Board.

ORDER

IT IS THE ORDER of the Pollution Control Board that:

Abbott Laboratories is granted variance from Rule 404 (d), Chapter 3, Water Pollution Regulations, for the waste treatment plant in North Chicago, Illinois, for a period of one year, subject to the following conditions:

1. That BOD₅ and suspended solids concentrations be limited to a monthly average of 20 and 25 mg/l respectively determined on the basis of 24-hour composite samples averaged over any consecutive 30-day period. In addition, no more than 5% of the samples collected shall exceed 2.5 times the limitations herein established for BOD₅ and suspended solids;
2. That Petitioner shall divert its treatment flow to the Gurnee sewage treatment plant at the earliest practical date, but in no event later than 30 days from the date the North Shore San-

itary District gives Abbott notice to divert, or 90 days after secondary treatment facilities are completed, whichever is sooner;

3. That Petitioner file monthly operating reports with the Agency indicating daily laboratory results on the parameters in question.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Opinion and Order was adopted by the Board on the 19th day of December, 1974, by a vote of 4 to 0.

Christan L. Moffett (g)