

ILLINOIS POLLUTION CONTROL BOARD
September 11, 1986

CITY OF LOCKPORT)
)
Petitioner,)
)
v.) PCB 85-50
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

OPINION AND ORDER OF THE BOARD (by R. C. Flemal):

This matter comes before the Board upon the June 14, 1985, Amended Petition for Variance filed by the City of Lockport ("Lockport"). Lockport seeks a five-year variance from 35 Ill. Adm. Code 302.209 (Fecal Coliform) and 304.121 (Bacteria) so that it may forego the necessity of chlorinating the discharge from its sewage treatment plant.

Lockport filed its initial Petition for Variance on April 18, 1985. On May 2, 1985, the Board found this petition to be deficient, and allowed Lockport 45 days in which to file an amended petition curing those deficiencies. It was in response to the May 2, 1985, Board Order that Lockport filed its June 14, 1985, Amended Petition.

Two citizen objections to the granting of variance to Lockport, apparently submitted independently of one another, were received by the Board on May 14 and May 22, 1985. One was simply withdrawn prior to hearing. The other was withdrawn, renewed, and then withdrawn again, all prior to hearing.

The Illinois Environmental Protection Agency ("Agency") filed its initial Recommendation in this matter on June 14, 1985, and its Amended Recommendation ("Amen. Rec.") on January 6, 1986. Both documents recommend the granting of the requested variance relief to Lockport, subject to conditions.

BACKGROUND

Lockport has a population of approximately 10,000, and is located near the Chicago Sanitary and Ship ("S&S") Canal on the banks of the Illinois and Michigan ("I&M") Canal in Will County, Illinois.

Lockport's sewage treatment plant ("plant") is designed to serve a population equivalent of 15,000, and has an average flow

of 2.0 million gallons per day ("mgd") (R. at 9). Influent to the plant passes through a barminutor and grit chamber before entering primary settling tanks (Id.). Flows less than 4.25 mgd are provided with secondary treatment by the activated sludge process operating in a contact stabilization mode (Id.). Effluent from the secondary settling tanks, and flows in excess of 4.25 mgd from the primary settling tanks, are combined in the chlorine contact tank (Id.). Final treated effluent is discharged through an outfall directly to Deep Run Creek (R. at 9-10).

Deep Run Creek, which drains a basin of less than one square mile between the I&M Canal and the S&S Canal, receives overflow from the I&M Canal at its headwaters and from the S&S Canal via several infiltration points (Id.). Below the plant, Deep Run Creek is approximately eighty feet wide and one foot deep, and is bordered by the Santa Fe Railroad tracks on one side and the S&S Canal embankment on the other (Id.). Deep Run Creek, empties into the S&S Canal below the Lockport locks (approximately one mile below the treatment plant discharges) (Amen. Pet., par. 2).

Lockport is in the process of upgrading its sewage treatment works. The total cost of the project was estimated in 1985 to be \$10,007,220 (Amen. Pet., p. 2). Lockport's share of this cost was estimated to be \$3,795.853 (Id.).

THE REQUESTED RELIEF

Lockport seeks relief from the fecal coliform effluent standard of 35 Ill. Adm. Code 304.121 and the fecal coliform water quality standard of 35 Ill. Adm. Code 302.209. Section 304.121 limits the level of fecal coliform that may be discharged in an effluent to 400 per 100 ml. Section 302.209 states in full that:

Based on a minimum of five samples taken over not more than a thirty day period, fecal coliform (STORET number 31616) shall not exceed a geometric mean of 200 per 100 ml, nor shall more than 10% of the samples during any thirty day period exceed 400 per 100 ml.

Lockport seeks the requested variance for a period of five years or until the Board adopts a new biological standard¹ (Amen. Pet., p. 1). Lockport seeks this variance in order to avoid the necessity of chlorinating flows from its plant which have received secondary treatment. Currently, the plant can provide secondary treatment for flows of less than 4.25 mgd. Lockport proposes to forego chlorination of flows below this amount, but continue chlorination of all flows exceeding 4.25 mgd (R. at 12-13). After the plant is upgraded, it will be capable of providing secondary treatment to flows of up to 6.14 mgd (R. at 12). After that occurs, Lockport proposes to chlorinate only those flows exceeding 6.14 mgd or those exceeding the volume of wastewater receiving secondary treatment, whichever is less (R. at 12-13).

ENVIRONMENTAL IMPACT

Deep Run Creek is a man-made stream, approximately 3.7 miles in length (R. at 13). It presently supports a small minnow population, and due to its limited canopy cover, limited pool development, and shallowness, is considered to be habitat limited (Id.). Lockport and the Agency agree that given these characteristics, the Creek's relative inaccessibility, and the fact that there are no known sanctioned public uses of the Creek, the addition of (secondary) treated but unchlorinated effluent will not adversely affect the environment or public health (Rec., p. 4).

Lockport added that it believes the granting of variance here would improve conditions in Deep Run Creek by reducing the potential effects of chlor-amines² in the discharge.

¹There is presently pending before the Board, in the R85-29 docket, a proposal which would readopt the fecal coliform regulations as they existed prior to the Board's action in the Matter of Amendments to Chapter 3: Water Pollution (Effluent Disinfection) (R77-12, Docket D) and also amend them so as to require chlorination on a seasonal basis only. There are at present no proposals before the Board which suggest the adoption of either alternative biological standards or alternative disinfection technologies. Thus, there currently are no proposals before the Board which, if adopted would obviate the need for chlorination.

²A by-product of the chlorination process.

HARDSHIP

Lockport contends that requiring it to comply with 302.209 and 304.121 would impose an arbitrary or unreasonable hardship on it. The June 14, 1985, Amended Petition filed by Lockport does not clearly delineate the aspects in which Lockport will suffer hardship if denied variance relief. On page 1 of the Amended Petition, Lockport states:

A variance is requested...for the express purpose of deferring or eliminating the need to construct new chlorination facilities at Lockport's sewage treatment plant.

However, on page 4 Lockport states:

chlorination facilities will be provided for stormwater overflows as part of the upgrading of the Lockport sewage treatment plant; these facilities can also be used to chlorinate the effluent which receives full secondary treatment.

Confusion surrounding the hardship was somewhat diminished by the stipulation of fact read into the record at hearing. That document, stipulated to by counsel for Lockport and the Agency, contains the following statement:

"Lockport is seeking relief from this fecal coliform standard to avoid having to chlorinate flows from its plant which receive secondary treatment. The City, in its improvement project, will provide the physical facilities necessary to treat all of its flows, but by not chlorinating flows which receive secondary treatment, it will save approximately \$5,000 a year in chlorination costs.

Apparently, contrary to its assertion otherwise, Lockport is therefore not seeking variance in order to avoid the construction of new chlorination facilities at the plant. Thus, the Board will assume that Lockport's upgraded plant will indeed contain chlorination equipment, and that Lockport seeks variance in order to avoid the necessity of using it to chlorinate effluent which has received secondary treatment.

COMPLIANCE PLAN

Lockport does not offer a compliance plan in its Amended Petition, even though such a plan is required by 35 Ill. Adm. Code 104.121(f). Rather, Lockport only generally states that it will comply by the end of the variance term or apply for site-specific relief (Amen. Pet., par. 10). The Agency, noting the

absence of a compliance plan, observed that "(Lockport) is apparently hoping that a regulatory change will eliminate the need for disinfection" (Rec., p. 7).

CONCLUSION

Lockport has not met an essential prerequisite to the granting of variance relief: the identification of, and commitment to, a compliance plan. It is not enough for a petitioner to generally promise to attain compliance by the end of a variance period; a compliance plan must include a detailed description of the method of control to be undertaken to achieve compliance, including a time schedule for attaining each increment of progress. Lockport's Amended Petition is clearly deficient in this regard.

Moreover, it is also inappropriate for a petitioner to seek variance relief on the basis of potential changes in the law which may result from pending regulatory proceedings. As has been noted by the Illinois Appellate Court, "If the speculative prospect of future changes in the law were to constitute an arbitrary and unreasonable hardship, then the law itself would be emasculated with variances, as there is always the prospect for future change". Citizens Utilities Company of Illinois v. Illinois Pollution Control Board, No. 3-84-0412 and No. 3-83-0498, consol. (June 17, 1985).

The Board further believes Lockport has not shown that it would suffer arbitrary or unreasonable hardship if denied the variance relief it seeks. The sole hardship asserted by Lockport is the \$5,000 annual cost of chlorinating its secondary treated effluent. Though not an insignificant sum, an annual expenditure of \$5,000 to a municipality the size of Lockport is not in this instance a substantial enough amount to warrant a Board finding that arbitrary or unreasonable hardship would result from compliance being required.

The Board is also concerned about an underlying issue which, though largely unstated, permeates the record in this case. That is the matter of the relative merits of chlorination as a disinfection practice. Lockport relies heavily on the fact that in the Matter of Amendments to Chapter 3: Water Pollution (Effluent Disinfection) (R77-12), the Board deleted the fecal coliform water quality standards for general use and secondary contact waters and relaxed the fecal coliform effluent limitation. As noted in Lockport's Amended Petition, the Illinois Supreme Court in People v. Pollution Control Board, 103 Ill. 2d 411, 469 N.E. 2d 1102 (1984) reversed the Board's repeal of the fecal coliform water quality standard relating to general use waters and its revision of the fecal coliform effluent limitation. The Supreme Court remanded the matter to the Board

for further consideration. As described in footnote 2, the fecal coliform regulations presently pending before the Board as a result of the Supreme Court remand are in the R85-29 docket.

Lockport apparently assumes, based on the Board's action in R77-12, that the Board believes the disadvantages of chlorination as a disinfection practice to outweigh its merits. Lockport's assumption, stated another way, might be that the Board still stands by the rationale and specific conclusions of its Opinion and Order in R77-12, Docket D. This assumption is implicit in Lockport's assertion that, under the R77-12, Docket D Opinion and Order, it would not have had to chlorinate its effluent because its discharge is more than twenty miles upstream of any public water supply or bathing beach (Amen. Pet., par. 5).

Lockport therefore seems to justify its requested variance relief in part on the Board's action in R77-12, Docket D. The Board's difficulty with this position is that it assumes that the Board already has, or will in this proceeding, determine the relative merits of chlorination as a disinfection practice. In response, the Board notes that it has not already made this determination; the Supreme Court remand of R77-12, Docket D essentially wiped the slate clean insofar as Board action in the fecal coliform area is concerned, and there has been no final action taken at this time in the matter of R85-29. The Board similarly notes that it will not judge the merits of chlorination in this proceeding, for a regulatory proceeding, and not a variance case, is the proper forum for such a determination.

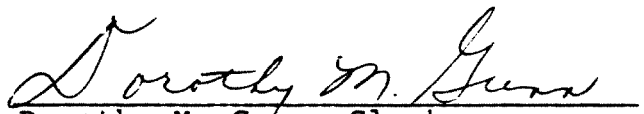
This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

The City of Lockport's request for variance from 35 Ill. Adm. Code 302.209 and 304.121 is denied.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 11th day of September, 1986, by a vote of 6-0.


Dorothy M. Gunn, Clerk
Illinois Pollution Control Board