

ILLINOIS POLLUTION CONTROL BOARD
June 30, 1983

CITY OF LOCKPORT,)
)
 Petitioner,)
)
 v.) PCB 83-48
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

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

This matter comes before the Board upon a petition for variance filed April 8, 1983, by the City of Lockport. The petition requests a variance through March 1, 1988 from the 10 mg/l BOD, 12 mg/l TSS deoxygenating wastes effluent standards of Section 304.120(c), and from violation of water quality standards, Section 304.105, for dissolved oxygen, Section 302.206, and ammonia, Section 302.212(b) and (e). The petition for variance requested a hearing.

The Environmental Protection Agency (Agency) filed its recommendation on May 16, 1983. Because Section 304.140 grants relief from effluent standards to dischargers filing timely construction grant applications, as Lockport has, the Agency felt a variance from the 10/12 standard was unnecessary. The Agency recommended the Board grant the variance for water quality violations of ammonia and dissolved oxygen but impose a condition that Petitioner's effluent not exceed 10 mg/l ammonia nitrogen. The Agency recommended that Lockport be required to follow a compliance schedule from the petition for variance, and requested that a variance be denied for "by-passes near the treatment plant", a phrase from the petition. The City of Lockport agreed with these recommendations and waived the request for hearing in a Response to Agency Recommendations filed May 20, 1983.

Two issues arose from these filings. The first is whether the ammonia nitrogen limitation requested by the Agency should be a never exceed value or monthly average limitation. The second issue concerns a statement in the petition for variance of Lockport's intention to seek site-specific regulatory relief from the effluent limitations and water quality standards that, in effect, require nitrification and tertiary treatment.¹ The Agency requested that the variance command completion of such facilities, with or without construction grant funds, if the

1. No petition for rulemaking has been received by the Board as of June 30, 1983.

site-specific rulemaking is denied. Lockport objected to this condition.

Lockport owns and operates a WWTP designed to serve a P.E. of 15,000 and an average flow of 2.0 MGD. The influent to the plant passes through a barminutor and grit chamber before entering the primary settling tanks. Flows under 4.25 MGD are provided with secondary treatment by the activated sludge process operating in a contact stabilization mode. The 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. The final effluent is discharged to Deep Run Creek through NPDES permitted outfall 001. Deep Run Creek is 3.7 miles long, man-made, and parallels the Chicago Sanitary and Ship (S&S) Canal. It flows into the Canal below the Lockport Locks and 1 mile downstream of the Lockport WWTP. Upstream of the WWTP, flows in Deep Run Creek come predominantly from an Illinois and Michigan Canal spillway and infiltration from the S&S Canal.

To evaluate the WWTP discharge's impact on Deep Run Creek, Lockport contracted with the environmental consulting firm of Huff & Huff, Inc. Their report found that Deep Run Creek was limited by the habitat related factors of the Creek and seepage from the S&S Canal (a Secondary Contact Water) into which it discharges, and that the Lockport WWTP was only one of the limiting factors. The report concluded that the discharges from the Lockport WWTP will cause little harm, at present pollutant levels, during the term of the variance. The Agency concurs that conditions are degraded but acceptable while construction to upgrade the plant continues.

The Board finds that the City of Lockport is not subject to the 10/12 deoxygenating wastes standard of Section 304.120(c) and, the petition for variance from that section for the effluent (outfall 001) and overflows (outfall 004) is denied. This finding is based on statements by the Agency, as administrator of the construction grant program, of Lockport's present participation in that program in conformance with Section 304.140 (Agency Recommendation, ¶. 15). Lockport agrees. Section 304.140 grants relief from the 10/12 standard where the discharger is eligible for construction grants, has filed an application for such grant, and takes all necessary actions in a timely manner. The compliance schedule, from petition for variance, pg. 5, presents a timely and ambitious program to take maximum advantage of construction grant monies. Accordingly, that schedule, as set forth below, is adopted as part of the Board's Order:

- by December 1, 1983, completion of design work for design of treatment and sewer system improvements;
- January 1, 1984, submission of design to IEPA for review;
- May 1, 1984, advertisement for bids;
- June 1, 1984, bid opening;

- July 1, 1984, award of bid;
- August 1, 1984, notice of award;
- September 1, 1984, commence construction.

This schedule assumes that actual construction must commence prior to October 1, 1984.

The Board finds, based on the Huff & Huff report, pp. 30-43, that there are violations of the dissolved oxygen water quality standard, Section 302.206, and ammonia nitrogen and un-ionized ammonia standard, Section 302.212. The Board agrees with the Agency (Agency Recommendations, ¶. 16) and the Petitioner (Petition for Variance, ¶. 10 & 12) that immediate compliance with those Sections would present an arbitrary and unreasonable hardship to the City of Lockport. It grants Lockport a variance, until March 1, 1988, from obligations it might incur through Section 304.105, due to downstream oxygen and ammonia violations of Sections 302.206 and 302.212(b). This variance is contingent upon the City of Lockport's WWTP effluent not exceeding an ammonia nitrogen as N limitation of 12 mg/l maximum, 6 mg/l monthly average.

The Board has long been concerned with ammonia nitrogen loadings tributary to the Illinois River as a source of downstream dissolved oxygen sags. See Section 304.122 and Board Opinions, 3 PCB 406, January 6, 1972. Since there are no indications in the filings for this proceeding of such dissolved oxygen sags, the Board will allow the City of Lockport to operate under its most recent ammonia nitrogen discharge record of 6 mg/l monthly average, 12 mg/l maximum.

The Agency and the City of Lockport have urged the Board to decide the impact of this variance on the construction of nitrification and tertiary treatment facilities, with or without federal funding, should the anticipated site-specific rulemaking by Lockport be denied. The Board declines to do so. This variance anticipates that the City of Lockport will comply, not later than March 1, 1988, with all applicable rules and regulations. Should the factual or regulatory situation change, these facts can be brought to the Board's attention.

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

ORDER

Petitioner, City of Lockport, is granted a variance from Section 304.105 as it applies to Section 302.206 and Section 302.212(b), subject to the following conditions:

1. This variance will expire on March 1, 1988.
2. The City of Lockport shall meet the following compliance schedule:

- by December 1, 1983, completion of design work for design of treatment and sewer system improvements;
- January 1, 1984, submission of design to IEPA for review;
- May 1, 1984, advertisement for bids;
- June 1, 1984, bid opening;
- July 1, 1984, award of bid;
- August 1, 1984, notice of award;
- September 1, 1984, commence construction.

This schedule assumes that actual construction must commence prior to October 1, 1984.

3. The city of Lockport shall meet the following effluent limitations for its WWTP discharges:

Parameter	Stoiet #	Daily Maximum	Monthly Average
NH ₃ , as N	31616	12 mg/l	6 mg/l

CERTIFICATION

I, (We), _____, having read and fully understanding the Order in PCB 83-48, hereby accept that Order and agree to be bound by all of its terms and conditions.

Petitioner


Authorized Agent

Title

Date

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the 30th day of June, 1983 by a vote of 4-0.



Christan L. Moffett, Clerk