

ILLINOIS POLLUTION CONTROL BOARD
June 5, 1986

CITY OF DIXON,)
)
 Petitioner,)
)
 v.) PCB 85-217
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

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

This docket was initiated upon the December 30, 1985 filing of what was captioned as a joint petition by the City of Dixon (City) and the Illinois Environmental Protection Agency (Agency) seeking an extension to the December 31, 1985 deadline contained in 35 Ill. Adm. Code 306.373 for the filing of petitions for exceptions to the combined sewer overflow (CSO) regulations. In summary, the City asserted that it had made every effort to comply with the date specified in 35 Ill. Adm. Code 306.373 but for reasons beyond its control, was unable to comply with said date: that because of unusually dry weather and a lack of significant rain events, the Petitioner was unable to monitor any first flush events to determine the level of compliance currently being achieved at the City's combined sewer overflows. Further, the City stated that it believes that existing combined sewer overflows have a minimal impact on Rock River water quality and do not restrict stream use, such that sewer separation projects, costing \$2,348,000 to build, would produce little benefit, but that the City does not have sufficient documentation at present to come before the Pollution Control Board with a Petition for CSO Exception.

By Order of January 9, 1986, the Board determined that as a matter of procedure this request would be more appropriately handled as a petition for variance from Section 306.373. The City filed a variance petition with the Board on February 4, 1986 but the petition was not served upon the Agency until March 24. By Order of April 10, the Board noted that to protect the rights of the public to timely file objections and the Agency to timely file either an objection or a Recommendation pursuant to Section 37(a) of the Environmental Protection Act, that the statutory time periods must be computed from March 24. No objections were filed, and as hearing was waived by the City, none has been held. On April 28, the Agency filed a Recommendation in support of grant of variance, subject to conditions. Decision in this

matter is being expedited consistent with the Board's observations in its April 10 Order.

The City of Dixon, which is located in Lee County, owns and operates a Municipal Wastewater Treatment Facility which serves the Dixon community consisting of approximately 18,147 residents and numerous commercial and industrial establishments. The treatment plant is located on the bank of the Rock River, into which discharge occurs. Facilities include raw sewage pumps, communitors,, grit removal, primary sedimentation, aeration tanks, final sedimentation, disinfection (chlorination), anaerobic digestion, sludge storage, drying beds, and assorted appurtenant facilities. The plant has a design average flow of 3.4 million gallons per day (mgd) and a design maximum flow of 8.4 mgd.

Pursuant to a variance granted in PCB 85-47 (August 15, 1985), expiring in October, 1986, the plant's Outfall 001 is operating under interim effluent limitations for BOD and TSS (respectively 30/40 on monthly averages and 45/60 on daily average). Variance was granted in conjunction with the City's upgrading of its dry weather sewage treatment facilities. The improvements consist of the construction of an additional clarifier and larger aerators. The Agency reports that these improvements are currently under construction with the larger aerators being installed in September, 1985, and the additional clarifier now scheduled for completion in late June or early July, 1986. Other minor work is also being completed.

The collection system tributary to the City's plant covers about 2,250 acres, according to Petitioner's Municipal Compliance Plan (MCP). Of that 2,250 acres, about 1,900 acres are served by separate sanitary sewers and the remaining 350 acres are served by combined sewers. The combined sewer area, then, is about 15% of the service area in the City. Since the interceptors were constructed when the majority of the service area was combined, a great deal of storm flow has been removed. Sewer separation for the remaining portion of the service area is expected to be accomplished as street improvements are made, but since the areas are primarily residential it is unlikely to be done anytime in the near future. The combined sewer areas generally lie along and adjacent to the interceptor sewers and overflows.

The City retained a consulting engineer in December 1984 to prepare a Combined Sewer Overflow Exception study in accordance with Agency guidelines. The engineers, with cooperation of City Sewage Plant personnel, set up a program to monitor major combined sewer overflows for first flush determinations during wet weather bypassing to the Rock River. Concurrently, the engineers completed Phase I - Background Information (Exhibit 1) and Phase II - Preliminary Stream Inspection (Exhibit 3), with the latter report documenting the stream characteristics (i.e. - high flow volumes, reaeration capacity, excellent water quality, productive sport fishery) and the lack of any evidence of

pollution (i.e. - no sludge deposits or other evidence of pollution were noted in the survey).

In the Spring of 1985 the City also initiated a major cleaning program for the interceptor sewers, the only such effort made in about 20 years. This involved removal of grit deposits in the range of one-half to two-thirds of the pipe diameter; the deposits were not previously known to be so substantial.

The City asserts that unusual conditions were encountered during the CSO monitoring period, such as there being one of the driest late spring, summer, and early fall periods in many years and the lack of any heavy, intense rainfall events. As a result of these weather conditions as well as the restoration of lost interceptor sewer capacity by cleaning, no overflows occurred, from the middle of May through the middle of October, at the CSO's that previously were activated for over 90% of all rain events. The interceptors conveyed all flows to the treatment plant, with the exception of one overflow for one event. This event was not representative of a realistic first flush (Exhibit 6). Therefore, no determination could be made as to impacts on the Rock River or the level of compliance with Section 306.305.

It is the City's opinion that first flush and a significant part of the next ten times dry weather flows (10x flows) from the combined sewer areas are probably being conveyed to the treatment plant by the clean interceptor sewers, but no documentation is available for presentation to the Board with an Exception Petition since studies to date were designed to monitor significant overflow events. The City believes that the cleaning of the interceptor sewers changed conditions so drastically that old studies, including the facilities plan overflow monitoring, are no longer applicable.

Accordingly, during the next year, the City proposes to monitor the overflows to determine which are still active, as well as to determine what percentage of first flush and 10x flows, for each active overflow, are presently being conveyed to the treatment plant during precipitation events. The City believes the information developed in these further studies will allow the City and Agency to come before the Board with an adequately documented Petition for Exception to the Combined Sewer Overflow regulations if indeed compliance with Section 306.305 is not being achieved.

The City also asserts that denial of variance to allow it to complete CSO monitoring will impose an arbitrary economic hardship. The City is in the EPA grant program having completed the Step I Facilities Plan in 1982. The Plan concluded that separation of the remaining 15% of the service area was the least costly full compliance alternative. However, the City's priority ranking is so poor that it has no expectations of receiving any grant funding, with the result that all improvements required must be paid out of local funding. The City alleges that the

estimated \$2,348,000 cost of a major separation project would be burdensome on a City already faced with a difficult economic situation, given the other upgrading required for the City's treatment plant and sewer system. The City's costs for the aforementioned plant upgrading project are \$630,000, of which \$355,000 are financed from local funds and revenue bonds, and \$275,000 from a non-USEPA grant. The City has also committed to complete sewerage works improvements by July, 1988, which include provision of standby power at the treatment plant, elimination of river intrusion during flood stages at certain overflows, and installation of waterlight lids on manholes in the floodplain. The City has not provided details on the financing of this \$246,000 project.

The Agency does not disagree with the City's various assertions. The Agency notes that there does not seem to be a significant impact on the Rock River by the City's CSO discharges, and states its belief that maintenance of the status quo for the variance period will have little impact on the river.

The Board finds that denial of variance would impose an arbitrary or unreasonable hardship, given that the City's sewer cleaning program has resulted in conveyance of considerably more flows to the plant, making prior CSO data obsolete, and that weather conditions have prevented accurate monitoring of what CSO discharges have occurred since the sewers were flushed. Variance is therefore granted until June 1, 1987 with conditions similar to those suggested by the Agency. The Board will, of course, entertain a petition for extension of this variance in the event that weather conditions during the next year do not allow the City to amass sufficient data to make reasonably informed CSO compliance determinations.

Finally, the Board notes that the utility of sewer cleaning in achieving CSO compliance was the subject of much discussion in the R81-17 hearings which lead to creation of the CSO exception procedure. The Board views the results of the City's one-time cleaning project with interest, and encourages the City to consider the benefits of a regular interceptor sewer cleaning program in development of any CSO strategy.

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

ORDER

1) The City of Dixon is hereby granted variance until June 1, 1987 from the December 31, 1985 deadline of 35 Ill. Adm. Code 306.373 for the filing of a petition for exception to the combined sewer overflow (CSO) regulations pursuant to 35 Ill. Adm. Code 306.350-306.374, subject to the following conditions:

- a) The City shall commence and complete CSO monitoring as expeditiously as is practicable.

- b) On or before February 1, 1987, the City shall notify the Agency in writing of the results of its monitoring. This notification shall include any determination made by the City as to a) its intent to file a petition for variance extension, b) its intent to file a CSO exception petition, or c) its lack of need for either due to achievement of CSO compliance. This notification shall be sent to James Frost, c/o Compliance Assurance Section, Division of Water Pollution Control, 2200 Churchill Road, Springfield, Illinois 62706.
- c) The City shall continue to pursue the upgrading of its treatment plant and sewerage system through the construction grants program and shall continue to take all reasonable measures to insure that the maximum flows practicable are conveyed to its treatment plant.

2) Within 45 days of the date of this Order, the City shall execute and submit to the Agency at the address listed in paragraph 1(b), above, a Certificate of Acceptance and Agreement to be bound to all terms and conditions of this variance. This forty-five day period shall be held in abeyance for any period this matter is being appealed.

I, (We), _____, having read the Order of the Illinois Pollution Control Board, in PCB 85-217, dated June 5, 1986, understanding and accept the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

Petitioner

By: Authorized Agent

Title

Date

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 5th day of June, 1986, by a vote of 7-0.

Dorothy M. Gunn
Dorothy M. Gunn, Clerk
Illinois Pollution Control Board