

ILLINOIS POLLUTION CONTROL BOARD
February 4, 1982

CITY OF ST. CHARLES,)
)
Petitioner,)
)
v.) PCB 81-131
)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,)
)
Respondent.)

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

This matter comes before the Board on the petition for variance of the City of St. Charles (City) filed August 19, 1982 as amended October 5, 1981. The City seeks variance from 602(b), 602(c)(1-2) and 602(d)(1) of Chapter 3: Water Pollution concerning sanitary sewer overflows and treatment plant bypasses. On December 11, 1981, the Illinois Environmental Protection Agency (Agency) filed its Recommendation in support of grant of variance with conditions. The City filed a Response December 21, 1981, to which the Agency replied January 4, 1982. On January 6, the City moved to amend its Response, which motion is hereby granted. The Agency filed comments to this response on January 20, 1982. Hearing was waived and none has been held.

The City of St. Charles, population 17,500, is located in Kane and DuPage Counties. The City owns and operates a wastewater treatment plant discharging an average 3.87 million gallons per day (MGD) of effluent into the Fox River. Since plant upgrading in 1975, the plant's hydraulic capacity has been a design average of 8.0 mgd and a design maximum of 20.0 mgd. The tributary sewer system is a separate sanitary and storm sewer system. As of 1980, the sanitary system consisted of over of 460,000 linear feet of sewer line with over 1800 manholes.

There is one treatment plant bypass (Overflow #1) located at the Riverside pump station which is operated by a manual gate valve. The Agency estimates the possible bypass from this point as being 5.9 mgd in the event of a one-year storm, and 9.2 mgd in the event of a five-year storm.

Five overflow points currently exist in the sanitary sewer line, a sixth (Overflow #3) having recently been eliminated. Possible overflows from these points are estimated by the Agency, in the event of one-year and five-year storms respectively, to be:

Overflow #2 (automatic gravity overflow) -- 1.2 mgd, 1.5 mgd; Overflows #4 (manual gate, gravity overflow) and 5 (automatic gravity overflow from #4) (together) -- 1.3 mgd, 3.6 mgd; Overflow #6 (submersible pump) -- 0.6 mgd, 0.8 mgd; Overflow #7 (automatic gravity overflow) -- 2.5 mgd, 3.1 mgd. The Agency, on March 10, 1978 placed on Restricted Status the portions of the sanitary sewer system and its tributaries having these 6 overflows.

The City states that, due to heavy rainfall, by-pass has occurred at one or more locations on 14 separate occasions during the calendar year 1981. Written reports to the Agency reveal that during 5 occasions between May 29, 1981 and August 3, 1981, effluent bypassed the treatment plant from Overflow #1 for over 44 hours. No data has been included concerning duration of sanitary sewer overflow events, perhaps because the sanitary sewer overflows are reported by the City verbally with the Agency's consent.

Environmental Impact

All but one of the overflow points discharge directly to the Fox River. The Agency reports that it operates a water quality monitoring station about 15 miles downstream from the City of St. Charles. While the fecal coliform count at this station was in excess of water quality standards from December, 1977 to September, 1979, the high fecal coliform levels cannot be solely attributed to the City's bypasses and overflows, as Geneva, Batavia, and Aurora also discharge into this stream segment. Biological samples collected in 1975 at three stations near the City showed a sample of the Fox to be "semi-polluted" at a station downstream of Overflows 3, 4, 5 and 7 but 0.5 mile upstream of the plant, while samples at two stations 0.4 and 2.5 miles downstream received "unbalanced" classifications. (These classifications are based upon diversity of aquatic organisms.)

The City asks the Board to take notice of its findings in three variance cases, Rossetter et al v. IEPA, PCB 78-147 (November 2, 1978); Shodeen v. IEPA, PCB 78-173 (November 2, 1978) and Wildrose Corp. et al. v. IEPA, PCB 78-253 (March 1, 1979). In each case, variance from the sewer system's restricted status was granted after a finding that minimal environmental impact would result from increased sanitary sewer overflows. Primary reliance was placed on a computer modeling study of the City's wastewater bypasses prepared by RJN Environmental Associates, Inc.

Sanitary Sewer Overflows and Rule 602(b)

Rule 602(b) expressly prohibits overflows from sanitary sewers. In 1977, the City contracted for an infiltration/inflow analysis of its system, with the aid of Step 1 funding under the federal construction grant program. Agency review of the analysis caused the City's sewer system to be placed on restricted status March 10, 1978.

The City has received Steps 2-3 funding for rehabilitation of its sewer system, and for modification of the Riverside Pumping Station. According to the grant's construction schedule, all work is to be completed by October, 1983 with start-up to be made November, 1983 (Pet. 6, Ex. A).

The City calculates that its share of the total cost for work done under Steps 1, 2, and 3 will be in excess of \$1,400,000. In addition to participation in the construction grant program, the City has engaged in a vigorous enforcement program to eliminate inflow from sump pumps, etc. As of May, 1981 all but 75 of 927 illegal connections had been eliminated.

The Agency recommends that variance from Rule 602(b) be granted, conditioned on compliance with grant conditions.

The Board finds that denial of variance would impose an arbitrary or unreasonable hardship. The threat to health from basement backups which would be caused by immediate elimination of the sanitary sewer overflow points, as well as the City's demonstrated and sizeable commitment to their expeditious compliance, overbalances the possible minimal environmental benefit to the Fox River which could conceivably result should variance be denied. Variance from Rule 602(b) is accordingly granted until November, 1983.

However, the Board wishes it to be clearly understood that this variance does not constitute a de facto lifting of restricted status from the sewer system. The intent of this variance is only to shield the City from enforcement for violations of Rule 602(b). It is not intended to allow for Agency issuance of sewer operation permits until either a) an applicant has been granted variance, or b) the sewer system has been removed from restricted status.

Treatment Plant Bypass and Rules 602(c) and (d)

Rule 602(c)(1) requires, in pertinent part, sufficient treatment of treatment plant bypasses of first flush storm flows to meet effluent standards. Rule 602(c)(2) requires bypasses of additional flows of not less than 10 times dry weather flow to receive at least primary treatment and disinfection. Rule 602(d) (1) specifies the date for compliance with Rule 602(c).

As noted previously, grant funding has been received for rehabilitation of the Riverside pump station, so that much of the routine bypassing at this point should be eliminated by November, 1983. However, the City's contemporaneous application for funds to build facilities necessary to treat non-routine bypasses was not granted.

Federal grant funds for construction of such facilities are agreed by the parties to be unavailable. On September 18, 1981, the City was awarded a \$99,000 grant for the design of excess

flow facilities, as well as for design and installation of a belt filter press. On September 23, 1981, the Agency advised the City that state grant funds are available for design and construction of excess flow facilities and a belt filter press.

The City believes that it can reach full compliance with Rules 602(c-d) only through construction of excess flow facilities. It states that, without grant assistance, it will have insufficient funds for such construction, particularly since the sewer relief projects will necessitate non-reimbursable expenditures of \$1,112,000. The City therefore requests that variance be granted, and that it be conditioned on the Agency's decision to provide a state grant for 75% of grant eligible costs.

The Agency has stated that it intends to provide such a grant, and recommends that variance be granted conditioned on the City's active pursuit of grant funding and expeditious facility construction. However, in the event it cannot make grant funds available, the Agency suggests that the variance terminate 3 months after its written notification of this fact to the City (Reply at 2).

The City objects to inclusion of the latter condition, largely on the basis that it believes it would be unfair of the Agency to fund less than 75% of the excess flow facilities' estimated cost of \$1,892,000. In essence, the Board is being requested to force the Agency to provide the City a grant for an amount certain.

The Board finds that grant of variance from Rules 602(c-d) is necessary to avoid imposition of an arbitrary or unreasonable hardship, given the minimal environmental impact to be caused by delay in compliance under these circumstances. However, the Board declines to exercise any authority it may have to commit the Agency to provision of a state grant; exigent circumstances may necessitate a different allocation of scarce grant funds. The Board will therefore include the Agency's suggested termination condition. The Board wishes to remind the City that it may seek variance from this Order of the Board if changed conditions cause the City to believe additional relief is necessary.

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

ORDER

1. Petitioner, the City of St. Charles is hereby granted variance from Rule 602(b) as it relates to its sanitary sewer bypasses, subject to the following conditions:

- a) This variance shall terminate December 1, 1983.

b) The City shall comply with the Project Schedule outlined in Grant No. C-172320-02.

2. The City is hereby granted variance from Rules 602(c) (1-2) and 602(d)(1) as they relate to its treatment plant bypass, subject to the following conditions.

a) Within 30 days of the date of this Order, the City shall apply to the Agency for a state grant for 75% of the grant eligible costs of an excess flow facility as such costs were defined by the Agency to the City pursuant to a letter of September 23, 1981, or alternatively for such greater amount as may be grant eligible.

b) The contract(s) for construction of an excess flow facility shall be awarded on or before July 1, 1984. However, in the event that a state grant is awarded after January 1, 1984, construction contracts shall be awarded within 7 months of the date of the award of the state grant.

c) Construction of the excess flow facility shall be completed on or before December 1, 1984. However, in the event that a state grant is awarded after January 1, 1984, construction shall be completed within 11 months of the date of the award of the state grant.

d) This variance shall in no event terminate later than February 1, 1987. In the event that the City receives written notification from the Agency that the City will not be awarded a state grant as described in a) above, this variance shall terminate 90 days from the date of such written notification.

3. Within 45 days of the date of this Order, the City shall execute and forward to the Illinois Environmental Protection Agency, Compliance Assurance Unit, Water Pollution Control Unit, 2200 Churchill Road, Springfield, IL 62706, an executed Certification of Acceptance and Agreement to be bound by all conditions of the variance. The forty-five day period herein shall be held in abeyance for any period this matter is being appealed. The form of said certification shall be as follows:

CERTIFICATION

I, (We), _____, having read the Order of the Illinois Pollution Control Board in PCB 81-131, dated _____, understand 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, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 4th day of February, 1982 by a vote of 4-0.

Christan L. Moffett
Christan L. Moffett, Clerk
Illinois Pollution Control Board