

ILLINOIS POLLUTION CONTROL BOARD
July 26, 1983

CITY OF EAST PEORIA,)
)
) Petitioner,)
)
) v.) PCB 83-38
)
 ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,)
)
) Respondent.)

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

This matter comes before the Board on the March 16, 1983 petition for variance filed by the City of East Peoria (City). The City seeks variance from 35 Ill. Adm. Code 305.102(b), 306.303 and 306.304 in order to bypass excess flows without monitoring during periods of wet weather and mechanical failure of lift station pumps, during its pursuit of grant funding for sanitary sewer rehabilitation work. 19 overflow and bypass points from its sanitary sewer system were specified in the petition. 16 of these overflow points were the subject of a prior variance from the predecessor Chapter 3 Rules 501(c) and 602(b) granted in PCB 81-36, May 14, 1983, 11 of which 16 were the subject of a still earlier variance in PCB 79-244, February 21, 1980. The records of these proceedings are hereby incorporated into this action.

On May 2, 1983 the Illinois Environmental Protection Agency (Agency) filed a Recommendation that variance from Section 305.102(b) be denied as unnecessary on the grounds that the City's NPDES permit contains no monitoring requirements with which the rule would require the City to comply. The Agency recommends grant of variance from Sections 306.303 and 306.304, but only as to 18 over-flow points and subject to a variety of conditions. These include compliance with conditions established in the PCB 81-36 variance, and with those contained in the Board Order in PCB 78-263--an Agency enforcement action against the City concerning permit violations and failure to have a permit relating to sanitary sewer overflows. On June 13, 1983 the City filed a response to the Recommendation challenging certain facts and conclusions, and commenting on the proposed conditions. Hearing was waived and none has been held.

The City owns and operates 3 wastewater treatment plants and their tributary sanitary sewer systems. During dry weather, the City's main problem is routine maintenance of the lift stations,

where one or both pumps could be out of service. During wet weather, the sewer system is subject to severe infiltration and inflow, causing basement backups. To relieve the backups and other related problems, the City maintains several sanitary sewer system bypasses.

The 19 overflow points, discharge points, and the plant to which they are tributary are as listed below, with new overflow points indicated by an asterisk:

<u>Plant</u>	<u>Overflow</u>	<u>Discharge Point</u>
STP 1	700 Springfield Rd-Manhole 30	Cole Creek
	1020 Springfield Rd-Manhole 27	Cole Creek
	400 Meadows Ave-Manhole 44	Dry Run Creek
	1500 Meadows Ave-Manhole 41	Dry Run Creek
	Maybee Ave-between Manhole 14 and 15	
	Cracklewood Ct-Manhole	
	*Flossmar Ct-Manhole	
	Woodlawn Lift Station	unnamed ditches
	Field Grove Lift Station	tributary to
	Lincoln Parkway Lift Station	Dry Run Creek
	Alice Street Lift Station	
	Brentwood Lift Station	
	Maria Street Lift Station	
	Pebble Court Lift Station	
STP2	Crawford Street and Railroad Alley-Manhole 64	unnamed ditches tributary to
	*Reinders-Manhole 34	Illinois River
	*Twin Oaks Ct-near Manhole 37	Ackerman Creek
STP3	*Crestarms Ct-Manhole	
	*East Oakwood Ave-Manhole	drainage area behind Fondulac Dam

[All of the above referenced creeks and the drainage area are tributary to Farm Creek, which is tributary to the Illinois River.]

The Agency reports that most of these points were inspected on April 6, 1983. As to the 5 new overflow points, the Agency reports that the Flossmar and Reinders overflows were installed in summer, 1982 without its knowledge, to relieve basement backups in a "few" nearby homes. No comment was made as to installation time of the Twin Oaks and Crestarms Ct. overflows. Each of these 4 overflow points are equipped with high-level overflows. None was discharging on the date of Agency inspection.

However, a bypass was occurring at the fifth, the East Oakwood overflow. This bypass originates on an 8-inch sewer about 50 feet downstream of a manhole. It was installed to relieve

backups in two homes against the Agency's advice: the Agency believes the bypass was unnecessary, believing that backups resulted from improper sewer maintenance rather than lack of hydraulic capacity. The City, however, notes that the plugging of this sewer is due to solids accumulation in combination with low flow conditions, and that it had installed necessary valves and piping near the floor of Fondulac Dam to allow for cleaning in this remote area with limited access. During sewer cleaning, discharge will occur when access valves are opened. The City believes that this overflow point is the most desirable of the admittedly undesirable alternatives during storm events, since equipping the affected homes with check valves to prevent backflow would likely cause a discharge from a manhole whose overflow would flow past a community well. The City also states that it is raising the elevation of the overflow to prevent bypassing from occurring until just prior to residential flooding, and that a flow level alarm is also being installed to allow time for a crew to respond.

Such response would amount to pumping of the line, since during wet weather the City installs portable pumps at various manholes to relieve surcharging. By way of example, between April 1-4, 5 areas were pumped. This estimated bypass of 10 million gallons would have been in addition to those from the previously listed permanent bypasses.

Another point noted in the April 6 inspection was that the 7 lift stations tributary to STP 1 were equipped with the high-level overflows, red light high level alarm systems and 2 submersible pumps required by previous variances, and those tested were in operating order. The Agency additionally noted that there were problems with the sewer line that diverts flow from the Springfield Road sewer to the Cole Creek interceptor. The City explains that a 60 foot section of ductile iron pipe running through a fault area was ruptured when the fault shifted "dramatically" during December, 1982. A flexible pipe was installed to accommodate further movement until permanent repairs, scheduled for this summer, can be made.

The City states that it intends to eliminate all of these overflows, provided that it receives grant funds to do so. The City currently has a Step 1 grant, with its Sewer System Evaluation Study scheduled to be completed in July, 1983. The City anticipates that design and construction of needed repairs would presently cost over \$6 million (its estimate in 1977 was \$2.5 million). Assuming it is awarded a Step 2-3 grant, the City believes sewer rehabilitation could be completed within 13 months of its receipt of a grant.

The City asserts that elimination of its sewer system overflows prior to receipt of grant funding would impose an arbitrary or unreasonable hardship, as it "does not have the financial capacity to fund a project of this magnitude" by itself.

As to past expenditures, it notes that it expended \$25,000 in 1981 to install the required visual and audible alarms at lift stations, \$15,000 in 1978 to build sewers to divert flows from Springfield Road to Cole Street. (No figures or further information were given as to the sewer cleaning program, or pump system and trailer mounted generator mentioned in the petition.)

The City contends that its system of bypassing is more environmentally desirable than the basement backup problems which would result without the system. Several of the overflows discharge at the bottom of steep ravines, while others discharge to storm sewers. Sampling information is therefore not available, but the City suggests that the environmental impact of its bypassing is minimized because of dilution of sewage by the infiltration/inflow to which the sewer system is subject, and because of the high flows in the receiving streams during the bypass events.

The Agency is in support of continued grant of variance from Section 306.303 and 306.304 subject to conditions, as to all but the East Oakwood bypass. The Agency agrees that the plugging of the bypasses without necessary sewer rehabilitation would result in a health hazard from basement backups which is more serious than that from bypassing of dilute sewage. However, the Agency doubts whether grant funding for sewer rehabilitation would be available. The Agency anticipates that the City's SSES will not be submitted or approved before passage of another 6-12 months, and "at this time, funds for actual construction of the [City's] project are not available, and funding at any time in the near future appears slim".

The variance conditions suggested by the Agency were the subject of response by the City, so their arguments will be presented in tandem as to certain of the conditions. The Agency first suggests that the City be required to adhere to a proposed compliance schedule which would require elimination of all overflows as of April 1, 1986 if grant funds are received, and as of April 1, 1988 if they are not, upon penalty of imposition of a sewer ban. The City responded that it could not commit itself to the compliance schedule as proposed because of uncertainty of funding sources.

The Agency suggests that audible alarms be installed at all lift stations, to eliminate unreported bypasses due to pump failure, blown fuses, etc. The City responds that the particular incident referred to in the Recommendation was a situation wherein an electrical malfunction resulted in outage of all power to the lift station, in which case an audible alarm would have been as inoperative as a visual one. The City doubts that installation of audible alarms would be "cost-effective", or result in more rapid response than through its practice of monitoring visual alarms.

A third condition, that the Springfield Road-Cole Creek interceptor be permanently repaired, was not objected to by the City.

The Agency recommends denial of variance for the East Oakwood bypass, as it believes that to do so would encourage the City to "add a bypass" to support new development. The City responds that the area is already developed, and was as of 1974 when the problem sewer line was installed to serve the area in replacement of septic tanks. The City would not object to having variance conditioned on twice-yearly sewer cleaning (as alternatively suggested by the Agency), and would further agree to obtain variance relief prior to installation of any further bypasses.

Finally, as to the requested variance from Section 305.102(a), the Agency recommends denial because the City's NPDES permit does not contain monitoring, sampling, and reporting conditions. (One suggested variance condition unobjectionable to the City was that monthly overflow reports be submitted in a specified form.)

The Board continues to find that denial of variance would impose an arbitrary or unreasonable hardship. Given the City's explanation of the East Oakwood problem, variance from Section 306.303 and 306.304 for all 19 overflows will be granted; variance from Section 305.102(b) will be denied as unnecessary.

The real issue in this case is not whether variance should be granted, but what its duration and conditions should be given the almost certain unavailability of grant funding. The Board agrees that the City must be forced to contemplate and prepare for unassisted commencement of sanitary sewer rehabilitation, but is not inclined to adopt the 1986/1988 schedule proposed by the Agency. The Board will grant variance until October 1, 1984, during which time the City will be required to complete its SSES, complete design work so that its actual funding needs have been determined, devise a plan for funding the necessary work, and to present a construction/compliance schedule.

As to other conditions, the Agency's suggestion that a variance contain a sewer ban triggered by violation of variance conditions is inappropriate. The Agency itself could impose a sewer ban at any time, or could seek such relief during the course of an enforcement action should the variance terms be violated. The grant of this variance does not limit the Agency's authority pursuant to Sections 306.402 or 306.403 to place those portions of the sewer system which have reached hydraulic capacity on restricted status, or those portions approaching hydraulic capacity on critical review. Grant of this variance (and previous variances) temporarily excuses non-compliance with the otherwise applicable provisions of the Act and regulations, but does not cause it to "disappear", and deprive the Agency of the ability to determine whether additional hook-ons would result in or contribute to violations of the type which are admitted in a petition for variance.

Finally, the Board will not require installation of audible alarms, for the reasons offered by the City. However, in that the City has stated that it is installing hour meters on its alarms to document the extent of future overflows (Response p. 2), this installation shall be included as a condition. The balance of the conditions as suggested will be included in the Board's Order.

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

ORDER

1. Petitioner, the City of East Peoria, is granted variance from 35 Ill. Adm. Code 306.303 and 306.304 until October 1, 1984, subject to the following conditions:

a) This variance applies only to the 19 overflow points listed at p. 2, supra;

b) The City shall submit to the Agency

i) a completed SSES on or before October 1, 1983,

ii) a completed sewer rehabilitation plan on or before March 1, 1984, and

iii) a construction schedule/compliance plan on or before August 1, 1984, detailing how the work will be funded by the City in the event that the City is advised by the Agency that federal or state grant funding is unavailable;

c) The City shall maintain the Springfield Road to Cole Creek Interceptor flexible pipe connection in the best manner practicable until permanent repairs are completed. Such repairs shall be commenced and completed in summer, 1983;

d) The City shall continue to submit monthly overflow reports. Beginning August 1, 1983, these reports shall additionally include all bypasses, shall separate bypasses into individual events rather than monthly totals, and shall indicate how durations were determined;

e) The City shall comply with all conditions of PCB 78-263;

f) The City shall not install any additional bypasses without obtaining appropriate variance relief prior to their installation;

g) The City shall clean the East Oakwood sewer as necessary to minimize bypassing, but in no event less than twice yearly; and

h) The City shall install the hour meters on its existing alarms as referred to on p. 2 of its Response as expeditiously as is practicable.

2. Variance from 35 Ill. Adm. Code 305.102(b) is denied as unnecessary.

3. Within thirty-five (35) days of the date of this Order, the City shall execute and send to Steven M. Spiegel, Attorney Advisor, Enforcement Programs, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706, a Certification of Acceptance by which it agrees to be bound by the terms and conditions. This 35 day period shall be held in abeyance for any period for which this matter is being appealed. The form of said certification shall be as follows:

CERTIFICATE

I, (We), _____, having read the Order of the Illinois Pollution Control Board in PCB 83-38, 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 26th day of July, 1983 by a vote of 5-0.

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