

ILLINOIS POLLUTION CONTROL BOARD
July 24, 1980

ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Complainant,)
)
v.) PCB 78-264
)
CITY OF KEWANEE, a Municipal)
Corporation,)
)
Respondent.)

DOUGLAS P. KARP, ASSISTANT ATTORNEY GENERAL, APPEARED ON BEHALF OF COMPLAINANT.

SCOTT E. CLEMENS, CITY ATTORNEY OF KEWANEE, APPEARED ON BEHALF OF RESPONDENT.

OPINION AND ORDER OF THE BOARD (by I. Goodman):

On October 13, 1978 the Illinois Environmental Protection Agency (Agency) filed an enforcement action against the City of Kewanee. On November 13, 1978 the Board granted the Agency leave to file an amended complaint which alleged violation of Sections 12(a), (b), and (f) of the Illinois Environmental Protection Act (Act) and Rule 901 of Chapter 3: Water Pollution Control Rules and Regulations (Water Regulations). Two hearings were held at which representatives of the news media were present. At the last hearing on May 13, 1980 the parties submitted a stipulation and proposal for settlement (Stipulation) and questions of the news media were answered; however, no public testimony from citizens was offered.

The Respondent owns and operates a sewage treatment plant in the City of Kewanee, Henry County, Illinois which discharges the plant's effluent into the western fork of the Spoon River pursuant to a NPDES permit. The parties stipulate that in violation of Respondent's NPDES permit, Sections 12(a), (b), and (f) of the Act and Rule 901 of the Water Regulations the Respondent: (1) has failed to submit several Discharge Monitoring Reports (DMR's), (2) has submitted untimely DMR's, (3) has failed for extended periods of time to monitor fecal coliform, chlorine residual, and heavy metals in its effluent, and (4) has exceeded effluent limitations for BOD₅ and total suspended solids (TSS).

The parties agree that Respondent's failure to operate and maintain the plant properly have contributed to violations, but also that the present facilities can not consistently meet BOD₅ and TSS effluent standards in Respondent's NPDES permit. Algae in the lagoon (used for tertiary and excess flow treatment) has caused BOD₅ and TSS concentrations to exceed NPDES permit limitations during the months of March through September, 1978. Furthermore, improvements made to the plant in 1972, including the addition of an effluent and storm water pump station, a lagoon, chlorination facilities, an aerated grit chamber, and an aerobic digester, did not increase the treatment capacity of existing secondary facilities or improve the plant's operational flexibility.

Respondent, currently in the Sewer System Evaluation Survey stage of a Step 1 United States Environmental Protection Agency (USEPA) Grant Project, has been preparing a Facilities Plan since September 1, 1977. Preliminary reports indicate that serious infiltration and inflow problems impair plant operation and effluent quality. Installation of a 48-inch interceptor in 1978 has increased the flow to the pumping facilities so that flows of 25 million gallons per day (MGD) are reached during high flow periods. Because pumping capacity (11.5 MGD) is considerably less than flow capacity, the plant's interceptor and treatment units surcharge. Activated sludge solids, consequently, are washed out of the aeration and reaeration tanks. Re-establishing biological growth and returning the system to normal generally takes several weeks.

There are three other problems. First, without a considerable expenditure for a chlorine contact tank (which may not be needed if pending regulation R77-12, Docket D is adopted) it is impossible to obtain adequate contact time for effective chlorination of the secondary settling tank. Second, the present treatment facilities, designed before ammonia-nitrogen effluent requirements were adopted, cannot meet present stream quality standards for that contaminant. Third, the city, with a priority number of 842, may not be eligible for construction grant funds for several years and it has alleged that without grant assistance it cannot finance improvements necessary to meet current effluent and water quality standards.

The parties have stipulated to terms of settlement which direct the city to do the following: (1) submit a Facilities Plan to the Agency by July 1, 1980, (2) fulfill all requirements necessary to obtain grant funds as expeditiously as possible, (3) implement upon receipt of grant funds all recommendations for the Facilities Plan and all other steps necessary to achieve compliance with environmental standards as expeditiously as possible, and (4) comply with an interim plan, designed to minimize environmental harm, pending grant-funded upgrading of the plant.

The interim plan requires: (1) reducing inflow and infiltration into the sewer system by removing downspout connections and repairing sewer defects, (2) routing of influent

through bypasses to avoid sewer overflows and "washing out" of activated solids in the aeration and reaeration tanks, (3) installing telemetering alarms to detect high water conditions, (4) increasing, training, and managing personnel to assure adequate maintenance, operation, and surveillance of the system, (5) employing accurate procedures and equipment for timely monitoring, (6) repairing, cleaning, or replacing present equipment, (7) acquiring auxiliary equipment and spare parts inventories, and (8) complying with interim effluent standards.

The interim plan, as noted, calls for the construction of bypasses to avoid sewer backups and washouts of activated solids. Section 304(b) of the Federal Water Pollution Control Act, 33 U.S.C. 466, et seq., provides for the promulgation of effluent limitations by the Administrator of the USEPA. These effluent limitations are contained in USEPA's regulations governing the National Pollutant Discharge Elimination System, 40 CFR Part 122, which regulations prohibit NPDES permits to allow bypasses unless certain conditions are met. 40 CFR §122.60(g)(4) in 45 Fed.Reg. 33354 [effective July 18, 1980]. The Board has reviewed these conditions and has determined that authorizing the Agency to modify Respondent's NPDES permit to be consistent with the interim plan would not encourage an improper permit modification. In the future, however, the Board would prefer that the public be notified of and given an opportunity to comment on bypass incidents of significant duration.

The Stipulation contains the following effluent limitations: 30 mg/l on a 30-day average and 45 mg/l as a daily maximum for BOD₅ and TSS, no limitations for NH₃, and fecal coliform and chlorine residual limitations of 400/100 ml daily maximum and .75 mg/l on a 30 day average respectively with the exception that no limitations are to apply if these two pollutants are discharged from a point other than the lagoon. The Board finds that these limitations are achievable and will minimize environmental damage in a reasonable manner until a federally-funded construction program is completed.

Finally, the parties stipulate that a penalty of \$2,000 be paid by Respondent for violating the provisions discussed herein. The Board, in considering all the facts and circumstances bearing upon the reasonableness of the discharges and monitoring report deficiencies, finds that the penalty amount of \$2,000 is a reasonable one in light of the decreased expenses occasioned by noncompliance. The Board hereby accepts the Stipulation, finding it to be a suitable resolution of the case and one which will minimize environmental damage until final compliance with the Board's regulations and the Act is achieved. The Board has fully considered the facts and circumstances involved in §33(c) of the Act and in the Board's Procedural Rule 331(a).

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

ORDER

It is the Order of the Pollution Control Board that:

1. The City of Kewanee has violated Sections 12(a), (b), and (f) of the Illinois Environmental Protection Act and Rule 901 of Chapter 3: Water Pollution Control Rules and Regulations.

2. The City of Kewanee shall execute the interim plan set forth in Paragraphs 29-34 inclusive of the Stipulation and Proposal for Settlement (Stipulation), filed June 2, 1980, which Stipulation is hereby incorporated by reference as if fully set forth herein.

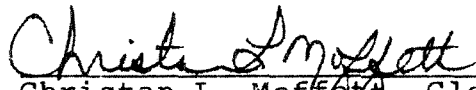
3. The Illinois Environmental Protection Agency is authorized to amend NPDES Permit No. IL0029343 so that it will be consistent with the terms of this Order.

4. Within 45 days of this Order, the City of Kewanee shall pay by certified check or money order a penalty of \$2,000, to be sent to:

Fiscal Services Department
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62706

Mr. Dumelle concurs.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Order was adopted on the 24th day of July, 1980 by a vote of 5-0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board