

ILLINOIS POLLUTION CONTROL BOARD
February 27, 1973

CITY OF GRANITE CITY)
)
 v.) PCB 72-184
) PCB 72-371
 ENVIRONMENTAL PROTECTION AGENCY)

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

This case involves two separate petitions for variance which have been consolidated. The first (72-184) requests a variance from Rule 405 of the Illinois Water Pollution Regulations which requires that no effluent shall exceed 400 fecal coliforms per 100 ml after July 31, 1972. The second (72-371) requests a variance from Rule 404(b)(i) which requires that the effluent shall not exceed 20 mg/l BOD and 25 mg/l suspended solids after December 31, 1973. Hearing was held on January 26, 1973.

The Granite City sewage treatment plant is primary only and discharges indirectly to the Mississippi River. It serves a population of 40,000 persons, but due to the loading from industrial sources, it has a population equivalent of around 230,000. The average daily flow is 10,039,500 gallons. The plant removal efficiency for total organic suspended solids is 60 per cent. The design capacity of the plant is 20 mgd. The plant consists of an aerated grit removal tank, primary sedimentation and vacuum sludge filtration.

The Agency has conducted investigations and has taken samples the primary effluent showing high levels of BOD, suspended solids and fecal coliform. On October 21, 1971 there was 470 mg/l BOD, 290 mg/l SS and 190,000,000/100 ml fecal coliform. On November 16, 1971 there was 700 mg/l BOD, 460 mg/l SS and 80,000,000/100 ml fecal coliform. On March 21, 1972 there was 410 mg/l BOD, 270 mg/l SS and 110,000,000/100 ml fecal coliform. On May 2, 1972 there was 9,900,000/100 ml fecal coliform. On June 27, 1972 there was 690 mg/l BOD, 350 mg/l SS and 140,000,000/100 ml fecal coliform.

The proposed additions to the plant include preaeration, additional primary sedimentation, activated sludge secondary treatment, chlorination, sludge heat treatment and incineration, primary treatment of combined sewer overflow up to 23 mgd and chlorination of combined overflow up to 23 mgd. Since January of 1971 the City has

taken certain steps to comply. An engineering consultant was retained, a preliminary report was prepared and final plans were drawn for the plant additions. The City's engineer submitted a project completion schedule in accordance with Rule 1002 to the Agency on August 31, 1972. The engineer estimated that the earliest date for operation of secondary facilities with plant startup and final adjustments would be March 1, 1975. The City alleges that in order to meet the December 31, 1973 deadline there would have to be an around-the-clock operation which would create an additional cost of \$2½ to \$5 million to the project. Construction bids have been received but none has been accepted yet.

There is some conflicting testimony regarding interim chlorination. The City's engineer claims that it would not be very practical because most of the interim equipment would not be easily incorporated into the final design. The engineer did not, however, have any actual estimate of the costs involved for interim chlorination. The engineer did testify that the interim equipment could be located in a place so as not to interfere with the construction of the new plant.

A representative of the Federal EPA also testified at the hearing. He stated that a 180 day notice hearing had already been held before his Agency and that interim disinfection at Granite City was an immediate necessity. He stated that such facilities can be provided on a temporary basis within a two month period by utilizing the construction adaptability and ingenuity shown by many heavy equipment contractors in housing their stationary operating equipment. The major cost of the facility would be the operational cost of the chlorine itself. He said that a competent equipment manufacturer and engineer for that company could, in one-half day, adequately locate the components on a ten by ten foot wooden frame slab and that this would be adequate for up to two years.

An engineer for the State Agency testified that the travel time for the effluent in the present outfall pipe is from twelve to thirteen minutes and that this would be an adequate time in which to chlorinate the effluent within the outfall pipe itself so that no separate contact chamber would be necessary.

We find that a variance from the secondary treatment deadline of December 31, 1973 is warranted in this case. At this point we will only grant the variance for one year from the date of this opinion and order. During that time we will observe the City's progress and extend the variance at a later date if appropriate. We will not, however, grant a variance from the disinfection requirement. We feel that interim disinfection is appropriate, necessary and feasible at the present time and that no need for a variance exists. The bacterial count is much too high to be continued unabated.

This opinion constitutes the Board's findings of fact and conclusion of law.

ORDER

1. A variance of one year, expiring February 27, 1974, is granted to petitioner from Rule 404(b)(i) subject to the following conditions:
 - (a) Petitioner shall report monthly to the Agency. regarding its progress on the proposed facilities.
 - (b) Application for extension of this variance shall be made at least 90 days prior to its expiration date.
2. The request for variance from Rule 405 is denied.
3. As stated in the interim order entered herein on February 6, 1973, petitioner is granted a variance from Section 921 (d) of the Illinois Water Pollution Regulations which requires that a Project Completion Schedule be approved before a permit can be issued by the Agency. This does not, however, excuse the filing of such Schedule altogether; it is only permission to issue the permit prior to that time.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Opinion and Order was adopted by the Board on the 27th day of February, 1973, by a vote of 3 to 0.

Christan L. Moffett

