

ILLINOIS POLLUTION CONTROL BOARD
June 14, 1972

DANVILLE SANITARY DISTRICT)
)
) #PCB72-161
 v.)
)
ENVIRONMENTAL PROTECTION AGENCY)

OPINION OF THE BOARD (BY RICHARD J. KISSEL):

On April 16, 1972, the Danville Sanitary District ("Danville") filed a variance petition with the Board requesting relief from paragraphs 1 and 2 of the Board order in Environmental Protection Agency v. Danville Sanitary District, PCB 71-28, decided May 26, 1971 and amended August 13, 1971. Paragraph 1 of the Order required Danville to install temporary sewage treatment facilities capable of adding sodium hydroxide and/or lime in order to continually adjust the pH of the raw wastes between 9.0 and 9.5. Danville was to operate these facilities so as to reduce effluent concentration of BOD₅ to 20 mg/l and of suspended solids to 50 mg/l. Paragraph 2 of the May 26, 1971 Order prohibited further sewer connections tributary to the Danville treatment facilities until BOD₅ effluent concentration was reduced to 20 mg/l and suspended solids concentration to 50 mg/l. On August 23, 1971, the Board authorized hookups for an additional 1500 population equivalents provided that the effluent discharged from the plant to the Vermilion River did not exceed 30 mg/l of BOD₅ and 25 mg/l of suspended solids.

As regards relief from Paragraph 1, Danville indicates that it will be able to produce a satisfactory effluent by means other than the sodium hydroxide or lime additions required by the Board. The Agency has no objection to Paragraph 1 being rescinded so long as Danville's effluent meets the applicable state standards.

Since the imposition of the sewer ban, Danville has taken several significant steps toward alleviating the BOD₅ and the suspended solids problems its plant faced. Danville sponsored an intensive examination of its sewage treatment facilities in order to discover the reasons its activated sludge process was not performing correctly. This examination showed a severe biological imbalance in the activated sludge process. A new chlorination system was installed and anhydrous ammonia was added to the waste stream in an attempt to correct the biological imbalance. Danville also established industrial waste standards and a surcharge ordinance in order to control the amount of industrial effluent and to pay for necessary improvements to provide adequate treatment for such wastes. Each affected industrial discharger has a time schedule

for compliance. In an attempt to combat the large sulfate concentrations coming into the plant and upsetting the anaerobic digestion process, Danville has entered into a contract whereby the sulfate discharger has provided Danville with an interim method of stimulating anaerobic digestion in the presence of excessive sulfur concentrations; by mid-1974, the sulfate discharger is to have installed its own pre-treatment facilities. Most importantly, Danville has significantly reduced the concentration of BOD₅ and suspended solids in its effluent. For example, March, 1972 data showed monthly average BOD₅ at 21 mg/l and suspended solids at 24 mg/l; for April, average BOD₅ was 20 mg/l and suspended solids, 22 mg/l; for May, BOD₅ averaged 19 mg/l and suspended solids, 15 mg/l. This performance is in compliance with the standard set in the Board order in PCB#71-28. The plant is also within the SWB-9 standard of 20 mg/l, BOD₅ and 25 mg/l suspended solids for activated sludge plants discharging to the Vermilion River. The plant is also successfully treating its suspended solids, a significant problem when Danville first appeared before the Board.

Based on data from the treatment plant through February, 1972, the Agency recommended that the variance not be granted as to Paragraph 2, the sewer ban, until Danville had shown "continued satisfactory operation (of the treatment plant) for another month." With the data presently received by the Board and accepted by the Agency as credible, the operations through May, 1972 have achieved that "continued satisfactory operation" which the Agency sought. We also note that continued improvement in operation has been demonstrated. The conditions imposed on Danville in Paragraphs 1 and 2 in PCB #71-28 will, therefore, be rescinded. The grant of their petition, of course, does not release Danville from its obligation to comply with the applicable state standard.

Over the past year, this Board and its staff have frequently orally commended Danville for the remarkable progress and innovation it has shown in the operation of its sewage treatment plant. We have encouraged other Illinois municipalities and sanitary districts to emulate Danville's advances. We add such praise now in writing. Danville's positive response and affirmative action to abate its pollution problems over the last recent months have heartened the Board that progress can be and is being made. It is also encouraging to see local industry working with the sanitary district to solve their mutual problems.

Danville Sanitary District is hereby released from the conditions imposed by Paragraphs 1 and 2 in the Board order in PCB 71-28, May 26, 1971 as amended August 13, 1971.

I, Christan Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Opinion was adopted on the 14th Day of June, 1972, by a vote of 4 to 0.


