

ILLINOIS POLLUTION CONTROL BOARD
February 14, 1973

CITY OF EAST ST. LOUIS)	
)	
v.)	PCB 72-393
)	
ENVIRONMENTAL PROTECTION AGENCY)	
)	
VILLAGE OF SAUGET)	CONSOLIDATED
)	
v.)	PCB 72-396
)	PCB 72-407
ENVIRONMENTAL PROTECTION AGENCY)	

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

This case involves three separate petitions for variance which have been consolidated. Hearing was held on the consolidated matter on December 18, 1972.

East St. Louis requests a variance from Rule 404 (a) (i) of the Illinois Water Pollution Regulations which requires that no effluent to the Mississippi River shall exceed 30 mg/l BOD₅ or 37 mg/l suspended solids after December 31, 1973. They now operate a primary sewage treatment plant consisting of sedimentation for removal of solids and skimming for floating matter. The materials so removed are pumped into two sludge thickening tanks, then pumped to vacuum sludge dryers and then removed to a landfill. The influent to the plant averages eighteen million gallons per day (MGD) consisting of 65% industrial waste, 25% domestic sewage and 9% infiltration. The plant serves the area within the city limits of East St. Louis which has a population of 82,000. The plant also serves a number of industries, the largest of which are manufacturing and meat packing plants. The effluent is discharged directly to the Mississippi River.

The East St. Louis operating report for September, 1972 shows the BOD level at 150 mg/l and the suspended solids at 180 mg/l. Samples taken by the Agency on July 28, 1972 show 55 mg/l BOD, 280 mg/l suspended solids and 460,000/100 ml fecal coliform. Samples taken by the Agency on September 6, 1972 show 110 mg/l BOD, 80 mg/l suspended solids and 7700/100 ml fecal coliform.

On November 3, 1971 East St. Louis entered into an agreement with an engineering consultant to determine preliminary and final engineering designs for a secondary waste treatment system. A preliminary engineering report was submitted in September, 1972 and the final plans are expected in March, 1973.

The Village of Sauget requests two variances. One is similar to East St. Louis in that it also seeks relief from Rule 404 (a) (i) of the Water Pollution Regulations (72-396) and the other (72-407) requests an extension of the variance granted in PCB71-287 related to the installation of secondary treatment facilities. The latter petition also requests an extension of the November 15, 1972 deadline provided in paragraph 1 (b) of the Order for completion of final engineering design to January 15, 1973. They also request an extension of the bond forfeiture date to January 15, 1973.

The Sauget plant provides only primary treatment and has a design average flow of 32 MGD. It discharges directly to the Mississippi River. The average daily flow is 20 MGD which is 99% industrial. The plant serves the area within the Village limits which has a population of 220 persons. The industrial load has a population equivalent of 320,000. There are six industries tributary to the plant, the largest of which is Monsanto Chemical Company.

Effluent samples taken by the Agency on February 1, 1972 show 180 mg/l BOD, 38 mg/l suspended solids and less than 100/100 ml fecal coliform. The May 10, 1972 Agency samples show 75 mg/l BOD, 42 mg/l suspended solids and 10/100 ml fecal coliform. The August 29, 1972 Agency samples show 100 mg/l BOD and 65 mg/l suspended solids. The August sample also showed other concentrations of iron (8.4 mg/l), lead (0.1 mg/l), mercury (.007 mg/l), zinc (1.5 mg/l), ammonia nitrogen (42 mg/l) and a low pH (3.5).

Sauget's engineering consultant completed its Phase IIA process design work on July 15, 1972. A formal written contract for Phase IIB engineering services was entered into with the same consultant on September 29, 1972. Except as relates to the November 15, 1972 interim deadline, Sauget has appeared to comply with the conditions of the December 21 and 30, 1971 Board Orders in PCB71-287. That Order provided, among other things that Sauget complete its final engineering design by November 15, 1972 and that they post a bond of \$50,000 to be forfeited if the deadline was not met. They are now requesting a two month extension until January 15, 1973. Inasmuch as Sauget has made substantial progress on its program in the past year we will grant the short extension requested. The bond will now apply to the extended January 15, 1973 date.

The petitioners are participants in the Southwestern Illinois Metropolitan Area Planning Commission (SIMAPC) which is charged with development of the area's official water quality management plan. There are alternative plans for regionalization of the area in which the petitioners are located. From investigation of those plans it appears that a delay in construction of the required facilities may well occur. A six month, \$50,000 study is currently being conducted to determine the feasibility of treating combined wastes from East St. Louis, Sauget, Lansdowne and Cahokia. Preliminary results of the study have indicated that those combined wastes do appear to be biologically treatable. Under the regional plan, each of the primary treatment plants would be retained with their effluents being transported to the regional secondary plant.

As an alternative to a regional secondary system the petitioners would build their own secondary plants. The results of the SIMAPC feasibility study will determine which alternative to take. The petitioners, however, are currently developing plans for their own secondary plants in the event that such alternative becomes more feasible after the study is completed. As to the relative costs involved, it is estimated that the capital cost of a regional plant would be \$21 million as compared to \$29 million total for separate plants. It is also estimated that over the life of the regional plant's operation and maintenance, savings of around \$30 million could be expected over what it would cost to operate and maintain separate plants.

We find that in either event the December 31, 1973 completion date will not be achieved. Inasmuch as there has been significant progress made up until now and also since the petitioners have made commitments to continue that progress we will grant a one year variance from Rule 404(a)(i) of the Water Regulations. We should note that at the hearing a representative of the Federal EPA also suggested that under the circumstances a variance should be granted.

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

ORDER

1. The Village of Sauget is granted an extension until January 15, 1973 from the interim date of November 15, 1972 for completion of its final engineering plans as specified in PCB71-287 orders dated December 21 and 30, 1971. The bond is also extended to January 15, 1973.
2. The interim order entered herein on February 6, 1973 is hereby incorporated into this order and made a part hereof.

I, Christan L. Moffett, Clerk of the Pollution Control Board, hereby certify that the above Opinion and Order was adopted by the Board on the 14th day of February, 1973, by a vote of 3 to 0.

Christan L. Moffett

