

ILLINOIS POLLUTION CONTROL BOARD
April 30, 1987

CITY OF CARTERVILLE,)
)
Petitioner,)
)
v.) PCB 87-22
)
THE ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

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

This matter comes before the Board on the petition for variance filed by the City of Carterville (Carterville) on March 2, 1987. Carterville seeks a variance from the provisions of 35 Ill. Adm. Code 309.241(a). Because Carterville has been placed on Restricted Status, it seeks the variance to complete the hook up of approximately 66 homes to a recently constructed sanitary sewer extension. Carterville waived hearing and none was held. On April 13, 1987, the Illinois Environmental Protection Agency (Agency) filed its Recommendation with a motion to file instanter, which is hereby granted. The Agency recommends grant of variance subject to certain conditions.

The City of Carterville was placed on Restricted Status by the Illinois Sanitary Water Board August 19, 1964 (Rec. 1). Carterville, a city of 3,445 population, owns and operates sewage treatment and collection facilities for its residents. The treatment facilities currently consist of a bar screen, primary clarifiers, three aeration tanks, a final clarifier, a storm water holding lagoon and a chlorine contact pond. Sludge is anaerobically digested and dried (Pet. 7-8; Rec. 1). Effluent from the facilities is discharged into Pin Oak Creek, which is tributary to Crab Orchard Lake. Crab Orchard Lake is used as a public water supply. (Rec. 1).

Carterville was issued an NPDES Permit (IL0025178) on June 30, 1983, effective July 30, 1983 and expiring on June 1, 1988. The permit allows interim limitations of 40 mg/l BOD and 50 mg/l TSS on a monthly average (Pet. 6; Rec. 1). Final limits are 10/12 BOD/TSS (Pet. 6; Rec. 1). The compliance schedule in this Permit stated that construction of a new treatment facility was to have been started in September, 1983 and completed on August 24, 1984. Petitioner is not in compliance with the schedule. (Rec. 1).

On April 2, 1985 Carterville received a Permit to construct and own (Permit No. 1985-HC-1861) the Pea Ridge sewage treatment plant and sanitary sewer extension to serve 66 single family

dwellings* subject to certain conditions (See: Exhibit A of the Petition). In the fall of 1985 and the Spring of 1986 Carterville undertook and completed construction of the sewer mains and lift stations. The cost of construction was \$212,467 (Pet. 2). Approximately \$255,000 of the project cost (construction and engineering) was from a CDAP grant of \$278,000 (Pet. 2). Construction of sewer services to the low and moderate income homes in the area serviced by the new sewer extension remains to be completed, at a cost of approximately \$60,000.

Construction started in September, 1986 and the plant is expected to be completed and operational in September or October, 1987 (Pet. 8; Rec. 3). The Agency noted that construction was delayed for two reasons. First, the sewage treatment plant was originally designed to be a regional facility serving the Village of Crainville as well as Carterville. Crainville, however, withdrew from the regional proposal (Rec. p. 3). Second, the low bid received for construction of the project was approximately 1.5 million dollars above the anticipated budget (Pet. 2, Rec. 3). Design changes were completed in June, 1986, and the revised bids were within project budget (Pet. 3). Construction has started and is approximately 15-20% complete (Pet. 8, Rec. 3). The project appears to be meeting its current construction schedule (Rec. 3). Upon completion the new facility will consist of a flow equalization lagoon, a grit chamber, mechanical bar screen, two oxidation ditches, two final clarifiers, three high rate filters, two aerobic digesters, conversion of an anaerobic digester to an aerated sludge holding tank, two vacuum assisted drying beds and chlorination facilities (Pet. 8; Rec. 3). The discharge will be diverted from Pin Oak Creek into Hurricane Creek, a tributary of the Big Muddy River (Pet. 7; Rec. 3). The Agency notes that this diversion also relieves Carterville of a phosphorus effluent limitation (Rec. 3).

In September, 1986, Carterville applied to the Agency for a permit to operate the already completed sewer extension. The Agency denied the permit, (Pet. 3), reciting the incorporation, in Special Condition 5 of the construction permit, which precludes the Agency from granting a permit to operate until the Agency has determined that the upgraded facilities are actually operating successfully as designed. (See: Exhibit B of Petition). Unable to obtain the operating permit, Carterville

*1 Statements in the Variance Petition regarding the number of homes involved in this project were ambiguous. No. 1(a) of the Petition sought relief to hook up "approximately 66 homes" to the sewer extension. No. 2(a) requested variance to allow construction of sewer services to "approximately 60" homes. And No. 2(j)(1) stated that variance was requested for "60 homes" and that construction to "the remaining 60 homes" would take another 60 days, suggesting the possibility that perhaps as many as 120 homes are here involved. The Board assumes that this variance petition seeks relief for 66 homes only.

seeks variance from 35 Ill. Adm. Code 309.241(a) to allow the construction of sewer services to the approximately 66 homes and to allow those homes to hook up to the sanitary sewer system.

The Agency has indicated that it agrees with Petitioner that denial of the requested variance would constitute an arbitrary or unreasonable hardship on Carterville. Construction of the sewer extension serving the Pea Ridge area was funded by a CDAP grant from the Department of Commerce and Community Affairs (DCCA). DCCA has expressed concern over why these sewers are not yet in use (Pet. 3; Rec. 3). If the original purpose of this CDAP grant is frustrated, DCCA could request that the grant be repaid (Rec. 3) and could deny consideration on further grants (Pet. 11; Rec. 3). As Carterville has many additional needs, including additional sewer extensions and a fire station, (Pet. 11), denial of the variance may impose the hardship of preventing Carterville from receiving the additional grants.

The City of Carterville has incurred great expense in undertaking this project. In addition to construction of the sewer extension pursuant to the CDAP grant of \$28,000, Carterville also expended \$120,000 to complete rehabilitation of its sewer system to reduce infiltration and inflow (Rec. 3). The total project cost is \$2,900,000. For a City of only 3,445 population and a median household income of \$14,118, this is a substantial burden (Rec. 3).

Furthermore, the 66 homes to be served by this extension are currently served by individual septic tank systems. Carterville alleges that of these existing septic tanks, some are undersized and some are served by poorly functioning, or non-functioning, tile fields (Pet. 9). The Agency found that because of the soil type found in the region, it is a frequent occurrence that septic tank wastes stand in roadside ditches or pools in lower areas (Rec. 3). The Agency notes that the existence of such waste constitutes a public health hazard, and that beginning construction now would eliminate the wastes during this construction season (Rec. 3).

The environmental impact of granting variance appears to be minimal. Because Carterville rehabilitated its sewer system and thereby reduced its flow by 0.235 mgd since completion of the inflow-infiltration removal program and because the 66 homes sought to be included add only 0.034 mgd to the receiving stream, the net result remains a decreased impact on the receiving stream. Moreover, the connections are not to be made until summer, a period of historically low flow to the plant (See: Rec. 2). The Agency notes that at most the added flow of 0.0345 mgd will increase the present low flow of 0.19 mgd by 18% or the design flow by 8.6% (Rec. 4). Even if the BOD/TSS in the added effluent were untreated, an 8.6% increase in loading would not cause the current average effluent to exceed the interim limits.

Pin Oak Creek, the current receiving stream, is tributary to Crab Orchard Lake, a surface impoundment used partially as a public water supply. The Agency does not anticipate that the additional flows caused by adding the 66 homes will have a detectable adverse impact on Crab Orchard Lake as Carterville's facilities discharge into Pin Oak Creek about 1/2 mile upstream from the Lake (Rec. 4). Further, the Agency notes that the water supply intake for the City of Marion, which is infrequently used, is separated from the creek discharge by a road crossway which reduces the water circulation (Rec. 4).

In concurrence with the Agency's assessment, the Board finds that denial of variance would impose an arbitrary and unreasonable hardship upon the Petitioner and will grant the requested relief, subject to the conditions delineated in the Order.

This Opinion constitutes the Board's findings of facts and conclusions of law in this matter.

ORDER

The Petitioner, City of Carterville, is hereby granted a variance from 35 Ill. Adm. Code 309.241(a) insofar as it relates to the hookup of the 66 homes, which otherwise would be prohibited under this provision and Restricted Status, for its Pea Ridge sewer extension, subject to the following conditions:

1. This variance shall commence on the date of the Board Order.
2. This variance shall expire when the construction of the sewage treatment plant is completed, but not later than December 31, 1987.
3. Petitioner, City of Carterville, shall apply for and obtain an operational permit from the Agency prior to connecting the 66 to the sewer system.
4. Within 45 days of the date of this Order, the City of Carterville shall execute and send to:

Mr. James Frost
Compliance Assurance Section
Division of Water Pollution Control
Illinois Environmental Protection Agency
2200 Churchill Road
P.O. Box 19276
Springfield, IL 62794-9276

a certificate of acceptance of this variance by which it agrees to be bound by its terms and conditions.

- 5. This 45 day period will be held in abeyance for any period during which this matter is being appealed. The form of the certification shall be as follows.

CERTIFICATION

The City of Carterville hereby accepts and agrees to be bound by all terms and conditions of the Order of the Illinois Pollution Control Board in PCB 87-22, dated April 30, 1987.

Petitioner

BY: Authorized Agent

Title

Date

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 30th day of April, 1987 by a vote of 6-0.

Dorothy M. Gunn
Dorothy M. Gunn, Clerk
Illinois Pollution Control Board