

ILLINOIS POLLUTION CONTROL BOARD  
September 30, 1971

THE VILLAGE OF WARREN )  
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 )  
 v. ) PCB 71-177  
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 Environmental Protection Agency )  
 )

Mr. F. Stanley Rodkey, Village Attorney, appeared for the petitioner

Mr. Frederick C. Prillaman, appeared for the respondent

Mr. James W. Richardson, appeared for Mr. and Mrs. John H. Balbach

Opinion of the Board (by Mr. Dumelle)

The Village of Warren (Warren) filed a petition for variance on July 7, 1971 and sought to be exempt from the operation of certain sections of Rules and Regulations SWB-14, Water Quality Standards, Intrastate Waters (hereinafter SWB-14). Specifically the Village sought to be relieved of complying with requirements in SWB-14 relating to tertiary treatment and BOD and suspended solids levels in its plant effluent. The Village with a population of 1500 operates a sewage treatment plant whose effluent flows into Wolf Creek in Jo Daviess County (R.15). At present the plant provides secondary treatment. It requested that the deadline for tertiary treatment of July 1, 1972 be extended for an indefinite period until needed land could be acquired through condemnation proceedings and the required treatment plant additions could be built. The parties owning the land on which the Village sought to expand were present and represented by counsel at the hearing in this matter held on September 7, 1971.

It is the decision of the Board that petitioner be granted a variance from the operation of the requirements of SWB-14 terminating 120 days from this date subject to certain conditions hereinafter set forth in this opinion and order.

The regulation from which the Village sought a variance in this case was enacted by the Sanitary Water Board, one of this Board's predecessors, in 1967 with the implementation plan section of the regulation being enacted in March 1968. The tertiary treatment requirement has thus been on the books for more than three years. SWB-14 is a comprehensive water pollution abatement regulation applicable to all intrastate waters in Illinois not covered

that a performance bond be posted and that compliance be ascertained by an independent testing firm.

We grant the variance to January 1, 1972, subject to the terms and conditions hereinafter set forth in the decretal portion of this opinion.

Petitioner is located in Belvidere, Illinois, and produces gray and ductile iron castings for automotive, agricultural and other industries. All operations, including the melting of raw metal, the molding of the castings, as well as shake-out and cleaning processes and the manufacture of cores, take place on the plant site.

Petitioner employs between 200 and 300 employees operating on a five-day week. The plant processes approximately 24,000 pounds of gray iron per hour and uses 150,000 pounds of sand in connection with its molding and cleaning operations. Excluding the cupola operation, which is not in issue in the present case, Petitioner's process weight rate is 175,000 pounds per hour. 2,000 pounds of particulate emissions, consisting primarily of sand and foundry dust are generated each sixteen-hour day, of which only approximately one-third is collected by equipment to be supplanted by the new equipment proposed to be installed pursuant to this variance request.

In simple terms, a gray iron operation consists of the melting of iron ore and scrap in cupolas, which molten metal is poured into molds, which, after cooling, are removed from the metal by a shake-out process and cleaned by sand blasting. The casting is then ground and polished. Cores made of sand and oil are processed at the plant and used in the mold operation. The shake-out, cleaning, blasting and core operations all generate a substantial amount of particulate emissions which presently are controlled inadequately by two wet collectors and four dry bag collectors, which are to be supplanted by two Venturi Scrubbers, one to be in the SPO and grinding room area and another in the so-called Taccone area. Schematic diagrams representing the present operations and proposed installations of both of these areas are in the record as Exhibits #27 and #28, respectively. Pursuant to permit granted by the Environmental Protection Agency (Petitioner's Exhibit #23, R.54), the installation is approximately 75% completed. The final completion schedule is for approximately November 1, 1971, and full operation of the new Venturis will be in effect by January 1, 1972. Upon operation of the two Venturi scrubbers, emissions from the in-plant operation would not exceed .05 grains per standard cubic foot, which is well within the applicable regulations relating to this operation. One of the present wet collectors will be used for control of emissions from the core-baking operation, which presently are uncontrolled. On the basis of the record, the amount of work done to date and the

and their duty under that regulation. The Village doesn't know where the improvements are to be located and appears to be in no hurry to be in compliance with the water pollution regulations. We agree with the Agency's conclusion in their Recommendation that "Petitioner has not proceeded in the most diligent and most expeditious manner."

The consulting engineers have estimated the cost of the needed improvements to be between \$143,650 and \$200,000 (R.85). Apparently, in attempting to resolve the present, interim and long term problem with the treatment plant, there was no thought given to the installation of a package treatment plant. To handle 100,000 gpd, the cost of a package plant effecting 98% removal of BOD is in the range of \$125,000 to \$150,000. Such an alternative may nonetheless be the best solution to the Village's problem, particularly when one considers that the degree of treatment required is 95% removal of BOD and not the more difficult to achieve 98%. Such portable advanced waste treatment plants are finding increased use in areas with critical problems. There is virtually no testimony on this subject, however, and we are thus unable to make any evaluations or decisions on the subject.

We grant the requested variance for a sharply delimited period in this case. Since even now the Village has no definite plans as to how it will proceed we must continue our jurisdiction and scrutiny of this cause. The Village must make every practical effort to resolve its site acquisition difficulties in the immediate future; within the next 90 days. We will require the Village to submit a supplemental petition by that time detailing with particularity all necessary measures which must be taken to get underway. The Village's program must include alternate means of accomplishing the necessary ends even if roadblocks such as unduly protracted proceedings in land acquisition are encountered. Use of package facilities is obviously another alternative that should be considered. In considering the supplemental petition the Board would be interested in knowing of the effect of the plant's effluent on the receiving stream and on Apple Canyon Lake if that is where the plant's effluent travels to. No results of stream sampling, either chemical or biological, were presented at the hearing on this matter. Such water quality data is generally a great aid to the Board in their consideration of variance requests. We need to know the environmental detriment caused by the grant of a variance. (See PCB 71-166 supra).

The request for extension of this variance beyond the 120 days, the supplemental petition, must be filed within 90 days and if complete enough may be acted upon without a hearing although at this point it would appear that a further hearing will be necessary to fully develop the facts.

As a further condition of this variance, we will require the Village to post a bond or other adequate security with the Environmental Protection Agency as we have done in most of the variance cases decided to date. The bond is provided for by

statute and is intended to serve as an incentive to the polluter to proceed apace with the clean up job. We will require a bond or other security in the amount of \$150,000 subject to modification after consideration of the supplemental petition. The obligation of the bond shall be the operation of the plant in compliance with SWB-14 after any period of variance has run its course.

Finally as a condition of this variance grant we will require the payment of a money penalty of \$200. There is a period of nearly two years in which almost nothing was done to effect compliance with the tertiary treatment requirement. The Village made no move to acquire needed land for expansion until sometime in 1971. It did not engage an engineering firm until December of 1970. The Village has missed two important deadlines specified in SWB-14. It has not made a timely submission of its plans and specifications and it has missed the deadline for the letting of contracts. Such lack of adherence to this State's overall water pollution abatement program cannot stand unnoticed and unheeded by this Board.

This Opinion constitutes the findings of fact and conclusions of law by the Board.

The Board having considered the petition, recommendation, transcript and exhibits in this proceeding, hereby grants the request of the Village of Warren for a variance subject to the following conditions:

1. This grant of variance from the provisions of SWB-14 requiring that steps be taken (.i.e. submission of plans and specifications, award of contracts) to provide for tertiary treatment by July 1972 extends for 120 days from this date. This variance is granted to allow the Village to acquire real property necessary for plant expansion and upgrading or to make concrete alternative plans.
2. The Village of Warren shall submit a supplemental petition for variance containing a complete program (with consideration of alternative plans including the use of package treatment plants) to the Environmental Protection Agency and the Board within 90 days specifying in detail the course which the Village will pursue to conform to the requirements of SWB-14. Such complete supplemental petition to extend the present variance may be acted upon without a hearing.
3. The Village of Warren shall post with the Environmental Protection Agency on or before October 20, 1971 a bond or other adequate security in the amount of \$150,000 and in such form as is satisfactory to the Agency, which sum shall be forfeited to the State of Illinois in the event the treatment plant shall be operated in contravention of the provisions of SWB-14 after the initial or extended (if any) period of variance is expired. Any extended date will be determined after the Village's submission of a petition and program as required by paragraph No. 2.
4. The Village of Warren shall by October 15, 1971 pay to the State of Illinois the sum of \$200 as a penalty for the violations found in the Board's opinion.
5. Failure to adhere to any of the conditions of this variance shall be grounds for revocation of the variance.

I, Regina E. Ryan, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above Opinion and Order on the 30 day of September, 1971.



Regina E. Ryan, Clerk  
Illinois Pollution Control Board