

ILLINOIS POLLUTION CONTROL BOARD
January 5, 1989

VILLAGE OF WINNETKA,)
)
Petitioner,)
)
v.) PCB 88-164
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

HARVEY M. SHELDON AND SHELL J. BLEIWEISS OF McDERMOTT, WILL, & EMERY APPEARED ON BEHALF OF PETITIONER THE VILLAGE OF WINNETKA.

WILLIAM D. INGERSOLL APPEARED ON BEHALF OF RESPONDENT THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY.

OPINION OF THE BOARD (by J. Theodore Meyer):

On December 15, 1988, the Board granted the Village of Winnetka (Winnetka) a variance from 35 Ill. Adm. Code 212.201 until September 30, 1991. The variance, which is subject to conditions, will allow Winnetka time to design, install, and test control equipment sufficient to comply with Section 212.201. This Opinion supports the December 15, 1988 grant of the variance.

Background

Winnetka owns and operates an electric generating plant on Tower Road at Lake Michigan. The plant consists primarily of five boilers and two diesel engines. Boiler #4 burns natural gas, boilers #5, 6 and 7 burn only coal, and boiler #8 can burn natural gas, coal, or a combination of the two fuels. The two diesel engines and boilers #4 and 8 are presently permitted to operate. Only boiler #8 is equipped with particulate controls. One common stack serves all equipment. The coal burning operation of boiler #8 is the subject of Winnetka's variance request.

In 1986 the Board promulgated Section 212.201, from which Winnetka now seeks a variance. That section establishes a particulate emission limit of 0.1 pounds of particulate matter per million British thermal units (lbs/MBtu) (0.15 Kg/MW-hr) for coal-fired boilers in the Chicago area. In the same rulemaking (R82-1), the Board provided a temporary site-specific limit of 0.25 lbs/MBtu for the Winnetka plant. The site-specific limit, found at 35 Ill. Adm. 212.209, was effective until January 1, 1989, or until the Board took final action in a site-specific rulemaking. Winnetka then petitioned for a permanent 0.25 lbs/MBtu limit. The Board denied that petition on August 4, 1988. Proposed Amendment to 35 Ill. Adm. Code 212.209, Village of Winnetka

Generating Station, R86-41, August 4, 1988. On November 3, 1988, the Board denied Winnetka's motion for reconsideration. Thus, Section 212.201 is now applicable to the Winnetka plant.

Relief Requested and Compliance Plan

Winnetka does not presently have sufficient control equipment on its boilers to comply with the 0.1 lbs/MBtu limit while burning coal. Thus, Winnetka seeks this variance to allow some operation on coal while the necessary control equipment is being designed, installed, and tested. The variance request, which was apparently discussed and agreed upon with the Illinois Environmental Protection Agency (Agency) prior to the filing of the petition, is designed to minimize the amount of coal used by Winnetka during the period of the variance. Only boiler #8 is covered by the requested variance, although Winnetka apparently plans to install control equipment on boilers #7 and 8. (Boiler #7 is not presently permitted and thus cannot be operated.) The variance would mandate Winnetka's use of reasonably available gas or electricity from other sources, including: (1) Winnetka's own production using gas or diesel oil; (2) electricity purchases from other utilities; and (3) use of natural gas. Winnetka would be allowed to burn coal to produce electricity only when it is unable to purchase electricity from another source for less than 31 mils per kilowatt hour (mils/KWH), or purchase natural gas at a price such that the cost of production is less than 31 mils/KWH. (31 mils/KWH is 3.1 cents per kilowatt hour: 1000 mils = \$1.00.) The only exception to this restriction is that coal could be burned in small quantities as necessary to maintain the protective ash on the boiler grate. (See R. 33-34.) Unless unusually severe weather conditions or other events occur which might affect the normal availability of gas and electricity, Winnetka expects not to have to rely on coal more than 60 days per year. This compares to Winnetka's past operations, where coal was used about 300 days per year. (R. 32.) Finally, the requested variance would require Winnetka to maintain its existing controls (a multiple cyclone) in good working order and perform stack tests to show that it is meeting the interim particulate limit of 0.25 lbs/MBtu.

During the course of the requested variance, Winnetka will proceed with the design, permitting, and construction of control equipment which will achieve compliance with the 0.1 lbs/MBtu particulate limit. Time within the variance period is to be used for study of control options, selection of an architect-engineering firm for design of the chosen control equipment, application for a construction permit, bidding and selection of suppliers and contractors, installation of equipment, testing of the equipment, and application for an operating permit. (R. 25-31.) Winnetka's construction permit application is to be submitted to the Agency by November 1, 1989. Construction must begin by February 1, 1990, and be completed by June 1, 1991. The variance would expire on September 30, 1991.

Winnetka has not yet specifically identified what control equipment it will install, although it has preliminarily decided to install a "baghouse" fabric filter. (Petition at 6; R. 27.) In connection with its site-specific rulemaking petition (R86-41), Winnetka submitted a report by HDR Techserv, Inc. which presented costs of five control equipment options. (R86-41, Ex.

15, Appendix F.) That report was not submitted as an exhibit in this proceeding, although the transcripts of the two hearings in that rulemaking were admitted as Exhibits 1 and 2 in support of this variance request. Those transcripts contain some discussion of the options identified by HDR. Additionally, the Board will take official notice of the analysis of control alternatives in its August 4, 1988 Opinion and Order in R86-41, at pages 5-7. At hearing on the rulemaking petition, Winnetka stated that adding fabric filter control equipment to boilers #7 and 8 would cost between \$2.7 million and \$4.4 million, with annual operating costs between \$26,000 and \$32,000. (Ex. 2, p. 106.)

In its recommendation, the Agency states that the length of the compliance schedule requested by Winnetka is reasonable in these circumstances. The Agency notes that Winnetka is undertaking a major engineering and construction project which will cost several million dollars. The Agency further maintains that a baghouse fabric filter system, which Winnetka has preliminarily chosen, should easily achieve compliance with the 0.1 lb/MBtu limit.

Environmental Impact

Winnetka contends that there would be no adverse environmental impact if its variance requested is granted. It states that the dispersion modeling and nuisance dust studies introduced in the rulemaking proceeding show that operation of the plant's boilers on coal at 0.25 lbs/MBtu does not endanger the National Ambient Air Quality Standard (NAAQS) for particulates or PM-10 (particulate matter under 10 microns in size). (Those studies were introduced as Exs 3A, 3B, 3C, and 4 in this proceeding.) Winnetka maintains that readings at the Agency's total suspended particulates (TSP) monitor at Crow Island School, about 2 kilometers southwest of the generating plant, show the cleanest air in the state. Finally, Winnetka notes that the modeling studies analyzed the effect of all four of Winnetka's boilers operating simultaneously. Because the requested variance would allow only boiler #8 to use coal, Winnetka contends that the variance would result in an actual reduction in particulate emissions.

The Agency agrees that the modeling study shows no violation of the NAAQS for particulates or PM-10. The Agency also concurs with Winnetka's statement that the conditions of the variance will result in a significant reduction in emissions. The Board is persuaded that the NAAQS for particulates or PM-10 are not likely to be exceeded.

Hardship

Winnetka states that the Board's denial of its site-specific rulemaking petition (R86-41), without allowing time for compliance, makes immediate compliance with the 0.1 lbs/MBtu standard impossible. The requested variance would allow time for necessary design and installation of control equipment sufficient to meet that standard. Winnetka asserts that denial of the variance would force it to close the electric plant. Winnetka contends that given the plant's insignificant environmental impact, denial of a transition period in which to add control equipment would result in an arbitrary and

unreasonable hardship on Winnetka and its citizens. The Agency agrees that denial of the variance would create a hardship on Winnetka.

Consistency with Federal Law

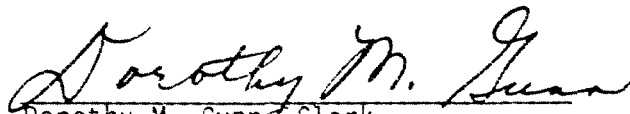
Both Winnetka and the Agency maintain that the Board may grant the requested variance consistent with the Clean Air Act. The Agency notes that on November 3, 1988, the United States Environmental Protection Agency (USEPA) proposed to approve Sections 212.201 and 212.209 as revisions to the Illinois State Implementation Plan (SIP). 53 Fed. Reg. 44494 (1988). In the proposed approval, USEPA finds the Winnetka provision in Section 212.209 approvable because Winnetka is in a TSP attainment area and the 0.25 lbs/MBtu limit would not relax any current limits. Because the variance conditions would reduce the use of coal at the plant, thus reducing particulates emissions, the Agency feels that the variance should be approvable by USEPA.

Conclusions

The Board finds that Winnetka has presented adequate proof that it would incur an arbitrary or unreasonable hardship if it were required to immediately comply with the 0.1 lbs/MBtu limit. This finding, in combination with the presence of a commitment to comply and the minimal environmental impact expected during the variance, persuade the Board that the requested relief should be granted. Thus, the Board will grant Winnetka a variance from 35 Ill. Adm. Code 212.201 until September 30, 1991, subject to conditions. Finally, the Board wishes to note that this case is an example of the speed with which Board proceedings can be resolved, where the parties show a commitment to proceeding as quickly as possible.

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

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion was adopted on the 5th day of January, 1989, by a vote of 7-0.


Dorothy M. Gunn, Clerk
Illinois Pollution Control Board