

ILLINOIS POLLUTION CONTROL BOARD
January 24, 1991

THE VILLAGE OF SAUGET,)
)
 Petitioner,)
)
 v.) PCB 90-181
) (Variance)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

LEE R. CUNNINGHAM AND RICHARD J. KISSEL, OF GARDNER, CARTON, AND DOUGLAS, APPEARED ON BEHALF OF PETITIONER;

BRUCE L. CARLSON APPEARED ON BEHALF OF RESPONDENT.

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

This matter is before the Board on a petition for extension of variance, filed by the Village of Sauget (Sauget) on October 4, 1990. Sauget seeks a one-year extension of the variance granted by the Board on September 13, 1989, in PCB 89-86. Sauget requests further variance from 35 Ill. Adm. Code 304.106 as it relates to the color of the effluent discharged from Sauget's American Bottoms Regional Treatment Facility (AB Plant). Section 304.106 states:

In addition to the other requirements of this Part, no effluent shall contain settleable solids, floating debris, visible oil, grease, scum or sludge solids. Color, odor and turbidity must be reduced to below obvious levels.

The Illinois Environmental Protection Agency (Agency) filed its recommendation on November 13, 1990, recommending an extension of variance. A public hearing was held on December 6, 1990. No members of the general public attended the hearing. Both parties subsequently filed briefs.

Background

Sauget was originally granted a variance from Section 304.106, as it relates to color, on September 8, 1988 in PCB 88-18. That variance expired on September 8, 1989. The Board granted an extension of the color variance on September 13, 1989, in PCB 89-86. That variance extension is to expire on January 31, 1991, or upon final action in United States and the State of Illinois v. The Village of Sauget, Illinois, Civil No. 88-5131 (S.D. Ill., filed May 13, 1988), whichever is sooner. As Sauget states in its

petition for extension, no final action will occur in the federal court case until after January 31, so the PCB 89-86 variance will expire on January 31, 1991. (Pet. at 1.) It is this variance that Sauget seeks to extend.

The description and operation of the AB Plant was detailed in the Board's opinion in PCB 88-18, and summarized in PCB 89-86. It is not necessary to reiterate the full description here. In sum, the AB Plant is a regional wastewater treatment plant located in Sauget, Illinois. The AB Plant was designed to provide primary and secondary treatment to wastewater from the City of East St. Louis, the Village of Cahokia, and the Commonfields of Cahokia Public Water District. The AB Plant also provides secondary treatment to industrial flows from Sauget's Physical/Chemical (P/C) Plant. Several major industrial facilities are served by the AB Plant, including Monsanto's Krummrich Plant, located in Sauget. (Pet. at 4-5; PCB 89-86 at 2.) Effluent from the AB Plant is discharged into the Mississippi River. (Rec. at 3.)

In addition to traditional biological treatment, the AB Plant was designed to utilize a powdered activated carbon treatment/wet air regeneration (PACT/WAR) system. On December 2, 1987, while Sauget was operating the PACT/WAR system, there was an explosion and fire in one of the six heat exchangers. The fire and explosion rendered one of the two WAR units inoperable, and Sauget has not operated the PACT/WAR system since that time. Instead, pursuant to an interim consent decree in the pending federal enforcement action, Sauget has been adding powdered activated carbon (PAC) prior to the aeration tanks. (Pet. at 5; Rec. at 2.)

Pursuant to the terms of the variance granted in PCB 88-18, Sauget investigated the origin of the color in the AB Plant's effluent. Sauget concluded that the wastestream from Monsanto's Krummrich Plant was the most highly colored of the wastestreams. Monsanto identified three compounds as the major contributors of color to the AB Plant's effluent: orthonitroaniline (ONA), paranitroaniline (PNA), and 4-nitrodiphenylamine (4-NDPA). (Pet. at 6; PCB 89-86 at 2-3.) Sauget investigated compliance options, and proposed the construction of an outfall extension and diffusion system. Additionally, Monsanto undertook extensive actions designed to meet federal pretreatment limits for the organic chemicals, plastics, and synthetic fibers (OCPSF) category. Monsanto was required to meet these limits by November 5, 1990. Sauget and Monsanto anticipated that this program would result in significant reductions in the color of the Monsanto plant's wastestream. (Pet. at 7; Tr. at 28-30; PCB 89-86 at 4.) On September 13, 1989, in PCB 89-86, the Board granted Sauget an extension of the original variance. During the term of this variance, the color of the AB Plant effluent has continued on a general downward trend. Measured in platinum color units, the monthly AB Plant effluent color readings have ranged from 492 in December 1989 to 112 in May 1990 to 237 in August 1990. (Pet. at

10-11.) Sauget now requests another extension of variance, based upon unforeseen delays in construction and its continuing efforts towards compliance. (Pet. at 7.)

Compliance Plan

Initially, Sauget states that it is uncertain as to whether it needs the requested extension of variance, since it states that it does not know if the "significant" reduction in color achieved during the current variance demonstrates compliance with the standard. (Pet. at 1-2; Pet. Brief at 2.) In essence, Sauget states that because Section 304.106 requires that color be reduced "to below obvious levels", it is unsure whether the color of its effluent constitutes "obvious" color. The Agency does not address this issue. Based upon its review of the record, the Board finds insufficient evidence to find that the reduction in the color of Sauget's effluent has reduced the color of that effluent to below obvious levels.

Sauget's compliance plan, as articulated in the PCB 89-86 variance proceeding and updated in the instant proceeding, has two distinct aspects. First, Sauget is in the process of constructing an outfall extension and diffuser. The diffuser is intended to reduce the impact of color by causing rapid mixing of the effluent into the receiving water--in this case, the Mississippi River. Sauget completed the design for the diffuser system, discussed the project with the Agency and the United States Environmental Protection Agency (USEPA), and applied for permits in 1989. The Agency granted a construction permit in January 1990, with the condition that Sauget conduct a biological and habitat study of the area. During the field work, however, USEPA expressed concern about the placement of the diffuser. USEPA asked Sauget to evaluate an alternative design--a single port diffuser placed in the main channel of the river. (Pet. at 13-14; PCB 89-86 at 4-5.)

As part of its re-evaluation, Sauget met with the Army Corps of Engineers (Corps) in February 1990 to discuss placement of the diffuser into the main channel of the river. The Corps told Sauget that it would only grant a permit to place the diffuser to the harbor line, not into the main channel. This contradiction between the regulatory authorities resulted in negotiations between Sauget, USEPA, the Agency, and the Corps. On May 18, 1990, Sauget was notified that the Corps would grant Sauget a construction permit for the outfall extension and diffuser system. In June 1990, Sauget was awarded a Build Illinois grant for 70% of the estimated \$1.5 million cost of the diffuser system. Sauget then advertised for and evaluated construction bids. On August 27, 1990, Sauget transmitted bid documents to the Agency. Construction of the outfall extension and diffuser began on October 22, 1990. The contract completion date is April 20, 1991, except as extended due to high water levels in the river. (Pet. at 15-16; Tr. at 10.)

The second aspect of Sauget's compliance plan involves Monsanto's \$25 million program to meet federal pretreatment limits for the OCPSF category. That work was completed by early November 1990. Sauget and Monsanto had expected that this work would significantly reduce the discharge of ONA, PNA, and 4-NDPA (the major color-causing chemicals) from the Monsanto plant to the AB Plant. However, while color has been reduced, the reduction has not been as great as Sauget and Monsanto had anticipated. PNA and 4-NDPA have been reduced to below detectable levels, and ONA has been reduced to levels lower than predicted in the PCB 89-86 variance proceeding. Sauget believes that an additional, as yet unidentified, constituent or constituents are causing the remaining color in the effluent, and that this unidentified constituent is either not reducible by OCPSF controls or is not part of a wastestream which is controlled under that program. (Tr. at 11-17, 30-35.) Monsanto and Sauget have committed to, and have already begun, a new program to identify the source of the remaining color and to determine further control options. (Tr. at 35-39.)

Environmental Impact

Sauget contends that there will be no adverse environmental impact during the requested variance extension, because the color standard is solely an aesthetic standard. Sauget states that the color is apparent in the Mississippi only in an area at and within five feet downstream of the present outfall, and notes that this color has been reduced during the term of the present variance. (Pet. at 12-13.) In its recommendation, the Agency maintains that the color at the outfall can have two effects: a possible reduction in photosynthesis, and an impact on the public's perception of its use or enjoyment of the river. The Agency states that it is unable to quantify this effects. (Rec. at 5.) In response, Sauget contends that because of the very small area impacted, any arguable increase or decrease in photosynthesis would have an "infinitesimal" impact on the Mississippi. Sauget also notes that the outfall is located so that it would be very difficult for the public to observe. Thus, Sauget maintains that the only possible adverse environmental impact would be the view of a very small area of the river by a limited number of people. (Response to Rec. at 2.)

Hardship

Sauget argues that a denial of a variance extension would constitute an arbitrary or unreasonable hardship. Sauget submits that the variance extension would cause no adverse environmental impact. Sauget further maintains that there is presently no available means of assuring compliance by January 31, 1991 (the expiration date of the variance), except refusing to accept the influents from industries which contribute to the color of the AB

Plant's effluent. Sauget contends that this would cause a major hardship to those industries and to the economy of southwestern Illinois. Sauget notes that in PCB 88-18 and PCB 89-86, the Board found that immediate compliance would impose an arbitrary or unreasonable hardship. Sauget states that this is true today. (Pet. at 19.)

In its recommendation, the Agency states that it is unable to assess any hardship to Sauget. Nevertheless, the Agency recommends that this Board grant this variance until January 31, 1992, or until the federal enforcement action is ruled upon, whichever comes first. The Agency recommends that "the Board take necessary action to allow the resolution of the variance to become part of the enforcement action pending in Federal District Court." (Rec. at 8.) The Agency contends that any action taken by the Board "may conflict with the much broader issues of toxicity and pretreatment being addressed in the federal action." (Rec. at 9.)

Consistency With Federal Law

Sauget believes that this variance may be granted consistent with federal law, since it has not requested variance from any water quality standards. (Pet. at 19.) The Agency also states that because there are no federal laws specifically limiting color in effluent, the Board may grant the relief consistent with federal law. (Rec. at 8.)

Board Determination

Based upon the facts in the record, the Board finds that immediate compliance with 35 Ill. Adm. Code 304.106, as it pertains to color, would impose an arbitrary or unreasonable hardship on Sauget. The Board also finds that Sauget has demonstrated that satisfactory progress has been made towards compliance during the term of the present variance. The construction of the outfall extension and diffuser system were delayed by a conflict between regulatory authorities, and construction has now begun. Additionally, Monsanto completed its OCPSF pretreatment program in a timely manner, although the reduction in color of the effluent was not as great as anticipated by Sauget and Monsanto. The Board grants extension of Sauget's existing variance.

The Board must note that it is disturbed by the Agency's position in this proceeding. Basically, the Agency states that it is unable to assess hardship, but recommends that the Board grant variance extension so that the request, and the underlying color problem, do not interfere in the pending federal enforcement action. The Board recognizes that color is related to the issues of toxicity and pretreatment, and that the solution to these problems may be complex. However, the Board does not believe that a pending enforcement action, before this Board or before a court, is sufficient reason to grant a variance. The Board emphasizes

that the instant variance extension is granted because the Board finds arbitrary or unreasonable hardship, coupled with minimal environmental impact, not because other action would interfere with the pending federal enforcement action.

The Agency recommends that this variance extension be granted until January 31, 1992, or until the pending federal enforcement action is resolved, whichever comes first. The Board notes that Sauget's construction is scheduled to be completed by April 20, 1991. However, because the construction contract allows for extension of that date if Mississippi River water levels are high, and because Sauget and Monsanto have committed to further exploration of color-causing bodies in Monsanto's influent, the Board will grant the term of the variance as proposed by the Agency. In its post-hearing brief, the Agency also recommended several conditions relating to Monsanto's program. (Resp. Brief at 5-7.) Sauget believes that no such conditions are necessary, but suggests that the language of one condition be modified, if the Board concludes that the conditions are necessary. (Pet. Supp. Brief at 1-2.) The Board finds that the Agency's suggested conditions, as modified by Sauget, should be imposed.

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

ORDER

The Board hereby grants the Village of Sauget extension of the variance from 35 Ill.Adm.Code 304.106, as it relates to color only. The variance extension is subject to the following conditions:

1. This variance extension will begin on February 1, 1991 (upon expiration of the previous variance granted to Sauget in PCB 89-86, September 13, 1989), and continue until January 31, 1992 or until final action by the district court in United States of America and the State of Illinois v. The Village of Sauget, Civil No. 88-5131 (S.D. Ill., filed May 13, 1988), whichever is sooner.
2. Sauget shall submit to the Agency the results of the program to be conducted by Monsanto (as described in the testimony of Monsanto's Environmental Superintendent, Steven D. Smith (Pet. Ex. 13 at 9-10; Tr. at 36-38) for identifying the principal causes of remaining color and assessing possible controls. Results of this program shall be provided as an initial report to be submitted by February 28, 1991, and supplemental progress reports shall be submitted quarterly thereafter until Monsanto completes this program. Each report shall include available sampling results, and to the extent reasonably feasible at the time of reporting, an assessment of the effectiveness and implementability of any further color controls identified as a result of this program.

3. Within 45 days of the date of this order, Sauget shall execute and forward to Bruce L. Carlson, Division of Legal Counsel, Illinois Environmental Protection Agency, 2200 Churchill Road, P.O. Box 19276, Springfield, Illinois 62794-9276, a Certificate of Acceptance and Agreement to be bound to all terms and conditions of this variance. The 45-day period will be held in abeyance during any period that this matter is being appealed. Failure to execute and forward this Certificate within 45 days renders this variance null and void. The form of the Certificate shall be as follows:

CERTIFICATION

I (We), _____, hereby accept and agree to be bound by all terms and conditions of the Pollution Control Board's January 24, 1990 order in PCB 90-181.

Petitioner

Authorized Agent

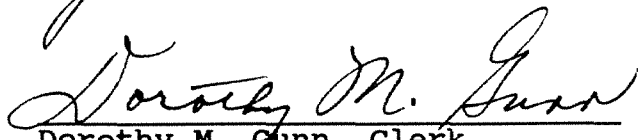
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Date

IT IS SO ORDERED.

Section 41 of the Environmental Protection Act (Ill.Rev.Stat. 1989, ch. 111 1/2, par. 1041) provides for the appeal of final orders of the Board within 35 days. The Rules of the Supreme Court of Illinois establish filing requirements.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 24th day of January, 1991, by a vote of 7-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board