ILLINOIS POLLUTION CONTROL BOARD
December 15, 1983

VILLAGE OF SAUGET,	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB 83-146
	)	
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
	)	
	)	
Respondent.	)	

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

This matter comes before the Board on the September 26, 1983 petition for variance filed by the Village of Sauget (Sauget). Sauget seeks extension of the variances granted to it in PCB 77-136, 79-88, and 80-67, granting relief from effluent limitations otherwise applicable to its wastewater treatment plant (WWTP). More specifically, the Village seeks relief from 35 Ill. Adm. Code 304.124 and 304.140 as they relate to the parameters lead, nickel, oils, and phenols, and from Section 304.120 as it relates to biochemical oxygen demand (BOD) and total suspended solids (TSS). Variance is retroactively requested from July 1, 1983 until June 30, 1988, or until the American Bottoms Regional Treatment Plant (ABRTP) becomes operational, whichever first occurs.

The Illinois Environmental Protection Agency (Agency) filed its Recommendation in support of variance, with conditions, on November 9, 1983. Its motion to file the Recommendation instanter is hereby granted. Hearing was waived and none has been held.

The Village of Sauget is located on the Mississippi River in St. Clair County, between the City of East St. Louis and the Village of Cahokia. The Village owns and, under contract, causes to be operated, a physical-chemical wastewater treatment plant ("WWTP") which became operational in 1977. The Sauget WWTP primarily treats industrial wastewater from local industries, but, in addition, serves a residential population of 200-300 person and some commercial establishments.

The Sauget WWTP consists of oil separation, screening, pumpage, grit removal neutralization, polymer addition, mixing and sedimentation. Sludge is treated by vacuum filtration and transported to a landfill. The Sauget WWTP has a design average flow ("DAF") of 8.0 million gallons per day ("MGD"), a design maximum flow ("DMF") of 13.0 MGD and a design population equivalent

of 75,000. Excess flow is diverted to a storm water basin for sedimentation. Discharge from the Sauget WWTP is directly to the Mississippi River.

In September, 1977 Sauget was designated the lead agency to design, construct, and operate the ABRTP to provide primary and secondary treatment of the wastewater from the Villages of Sauget, Cahokia, Brooklyn, National City and Alorton, and from the Cities of East St. Louis and Certreville. The American Bottoms Regional Treatment Plant is designed to include a dual cyclone grit chamber, four primary clarifiers, a screw pump lift station, eight activated sludge aeration basins, final clarification, an effluent pump station, powdered activated carbon to be added to the the aeration bays, wet air oxidation of secondary sludge and regeneration of carbon, and four vacuum filters. This project also consists of rehabilitation and construction of pump stations. The ABRTP will have a DAF of 27 MGD, a DMF of 52 MGD, an organic loading of 65,400 lbs/day and a suspended solids loading of 118,400 lbs/day. This plant is designed to produce an effluent of 20 mg/l BOD, 25 mg/l TSS, and effectively treat industrial contributions. Discharge will be to the Mississippi River.

Design and construction of the $60 million ABRTP has proceeded with financial assistance from the federal construction grants program. Construction of the ABRTP began in January, 1983. Although dioxin was discovered in the soil near the effluent pump station in February, 1983, construction of the regional treatment plant is currently proceeding unobstructed. On September 6, 1983 Sauget received a construction permit which relocated the effluent pump station to a different location. The ABRTP is scheduled to be completed in the first quarter of 1986 and to be fully operational in early 1987, after a year of "start up" and shake-down operation.

Sauget asserts that immediate compliance would impose the same sort of arbitrary or unreasonable hardship as it has in the past, given its long and heavy financial commitment to the ABRTP project which is finally approaching completion. It asserts that it has "substantially complied" with conditions of prior variances, and seeks variance containing the same interim effluent limitations as in prior variances.

In its Recommendation, the Agency has most thoughtfully reduced the contents of the prior variance orders to chart form, which is reproduced below:

PCB No.	Date of Board Order	Parameter	Board Rule	Interim Limitations (mg/l) Monthly Avg	Daily Max.	Expiration Date
77-136	06/22/78	Mercury	408(a)	0.005		07/01/79
		Oils	408			
			409(a)	58		07/01/83

		Phenol	408			
			409(a)	19		07/01/83
		BOD_5	404(b)(i)	332		07/01/83
		TSS	404(b)(i)	120		07/01/83
79-88	06/22/79	Oils, Fats, & Grease	408(a)	200		06/30/83
		Lead	408(a)	0.38	0.78	05/01/80
		Nickel	408(a)	1.77	2.68	05/01/80
80-67	10/17/80	Lead	408(a)	0.38	0.78	06/30/83
		Nickel	408(a)	1.77	2.68	06/30/83

Performance data from 1981 to 1983 was provided (Rec. p.4), which show that the Sauget plant has consistently been well under the above listed effluent limitations. The Agency recommends that variance from the lead and nickel limitations of Section 304.124 is unnecessary, since with the exception of two excursions of the daily maximum for nickel, the discharge has been in compliance with the rule. As to the levels for BOD, TSS, and phenols, the Agency suggests that the interim levels be made more stringent, to reflect actual performance and to prevent back-sliding. The performance data and Agency-suggested interim levels are summarized below. Data summarized below were collected for each of the months between and including October, 1981 and August, 1983:

	BOD (mg/l) Monthly Avg.	TSS(mg/l) Monthly Avg.	Oil & Grease Monthly Avg.	Phenol Monthly Avg.
Performance Range	22-190	7-59	17-43	1.8-13
Agency Suggested Interim Limit	200	60	45	15

It should be further noted that the high readings for BOD, TSS, and oils occurred in 1981, with subsequent performance being considerably better. The high phenol "blip" occurred in May, 1983, with other readings at 9 or below.

Finally, the Agency stated, without elaboration, that "compliance with the other conditions of the Board Orders is considered marginal. The Sauget WWTP discharge has had numerous pH excursions of the Board's rules and regulations as well as unnatural coloration." (Rec., p.5).

In examining the conditions in past variances in light of plant performance, the Board finds that Sauget has complied with the directive to reduce lead and nickel concentrations in its effluent. The Board cannot determine what other conditions may have been violated.

Based on the performance of the existing plant, the imminent completion of the ABRTP, and lack of new information concerning environmental harm from discharges during the last variance period, the Board finds that denial of variance would impose an arbitrary or unreasonable hardship. Until July 1, 1987 or any earlier attainment of an operational level by the ABRTP, variance is granted from Section 304.124 as it relates to oils and phenols and from Section 304.120 as it relates to BOD and TSS. The Board agrees with the Agency that the interim limits set by the prior variances are too loose, but further believes that those suggested by the Agency are also too loose. In choosing the limits set out in the Order, the Board has disregarded the 1981 high levels, and established ones which reflect 1982 and 1983 performance levels. The Board expressly declines to make this variance retroactive to July, 1983. This petition was not even filed until September 26, and no explanation has been given for the 3 month delay in filing upon termination of the prior variances.

Variance from Section 304.140 as to all parameters is denied as unnecessary, variance from Section 304.124 as to nickel and lead is denied as unneeded, given plant performance in 1982-1983.

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

ORDER

1. Petitioner, the Village of Sauget, is hereby granted a variance from 35 Ill. Adm. Code 304.124 as it relates to oils and phenols, and from Section 304.120 as it relates to BOD_5 and TSS until July 1, 1987 or until the American Bottoms Regional Treatment Plant becomes operational, whichever occurs first, subject to conditions as follows:

   a. Sauget's oils effluent discharge shall not exceed a monthly average of 35 mg/l.

   b. Sauget's phenols effluent discharge shall not exceed a monthly average of 10 mg/l.

   c. Sauget's BOD_5 effluent discharge shall not exceed a monthly average of 150 mg/l.

   d. Sauget's TSS effluent discharge shall not exceed a monthly average of 30 mg/l.

c. Sauget shall make every reasonable effort to complete construction of the ABRTP by April 1, 1986 and obtain operational level by April 1, 1987.

2. Petitioner's request for variance from 35 Ill. Adm. Code as it applies to nickel and lead, and from Section 304.140 is denied as unnecessary.

3. Within forty-five days of the date of this Order, Petitioner shall execute and forward to the Illinois Environmental Protection Agency, Division of Water Pollution Control, Compliance Assurance Section, 2200 Churchill Road, Springfield, Illinois 62706, a Certificate of Acceptance and Agreement to be bound to all terms and conditions of this variance. This forty-five day period shall be held in abeyance for any period this matter is being appealed. The form of the certificate shall be as follows:

CERTIFICATE

I, (We), _____, having read the Order of the Illinois Pollution Control Board in PCB 83-146, dated_____, understand and accept the said Order, realing that such acceptance renders all terms and conditions thereto binding and enforceable.

_____
Petitioner

_____
By: Authorized Agent

_____
Title

_____
Date

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the 5th day of December, 1983 by a vote of 7-0.

Christan L. Moffett
Christan L. Moffett, Clerk
Illinois Pollution Control Board