

ILLINOIS POLLUTION CONTROL BOARD
March 22, 1985

BLOOMINGTON-NORMAL SANITARY)
DISTRICT,)
)
Petitioner,)
)
v.) PCB 85-34
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

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

This provisional variance request comes before the Board upon a March 22, 1985 Recommendation of the Illinois Environmental Protection Agency (Agency). The Agency recommends that a 45-day provisional variance be granted to the Bloomington-Normal Sanitary District from 35 Ill. Adm. Code 304.120(c) and 35 Ill. Adm. Code 304.141(a) to allow bypassing of the tertiary filters so that media can be added and necessary piping modifications made and to allow the Petitioner to exceed its NPDES Permit effluent biochemical oxygen demand (BOD) and suspended solids (SS) limits during the period that the unit is out of service.

The Bloomington-Normal Sanitary District, which serves 80,000 residents in a 25 square mile area, owns and operates three wastewater treatment facilities. Preliminary, primary, and secondary treatment are provided by each of these three wastewater facilities before their secondary effluents are combined for tertiary treatment and disinfection. (Rec. 1). Additionally, each facility has the capacity to disinfect its secondary effluent individually if necessary. These three facilities have a total design average flow of 16.0 million gallons per day (mgd).

The Petitioner's NPDES Permit provides that its wastewater treatment facilities must meet effluent limitations of 10 mg/l BOD and 12 mg/l SS. The following table summarizes the relevant information obtained from the Petitioner's discharge monitoring reports to the Agency pertaining to BOD and suspended solids levels during the past year:

<u>Month</u>	<u>Flow (mgd)</u>	<u>BOD (mg/l)</u>	<u>SS (mg/l)</u>
March, 1984	22.6	10	8
April	24.3	9	9
May	23.6	8	7
June	17.3	8	3
July	12.3	9	3
August	11.9	11	3
September	12.5	10	3

October	14.8	10	4
November	17.1	10	4
December	18.2	11.6	6
January, 1985	17.5	11	6
February	<u>17.6</u>	<u>16</u>	<u>12</u>
Average	17.5	10.3	5.7

(Rec. 1-2).

The Petitioner has also supplied information pertaining to the secondary effluent from each of the three individual treatment facilities for calendar year 1984; March to May, 1984; and January to mid-March, 1985. The Agency believes that these data reflect the current trend and indicate what concentrations of BOD and suspended solids can be reasonably expected in the secondary effluents individually and collectively during the time period of the requested provisional variance. (Rec. 2). The pertinent information is as follows:

BLOOMINGTON AND NORMAL SANITARY DISTRICT

	1984				1985		
	<u>Annual</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.*</u>
<u>Plant #1</u>							
Flow (mgd)	8.2	11.8	12.6	12.2	7.2	8.1	14.7
BOD (mg/l)	25.9	21.0	18.3	18.0	29	42	16.2
SS (mg/l)	25.4	24.8	26.1	27.9	28	42	38.4
<u>Plant #2</u>							
Flow (mgd)	2.0	2.1	2.1	2.2	2.9	1.7	2.0
BOD (mg/l)	12.4	12.7	9.4	10.9	23	26	11.6
SS (mg/l)	14.8	17.3	17.6	13.5	13	14	8.2
<u>Plant #3</u>							
Flow (mgd)	7.2	8.6	9.6	9.3	7.3	7.7	9.4
BOD (mg/l)	7.9	7.8	5.0	4.7	12	13	10.8
SS (mg/l)	10.0	9.1	8.8	5.1	12	12	18.2
<u>Composite Sample**</u>							
Flow (mgd)	17.4	22.5	24.3	23.7	17.4	17.5	26.1
BOD (mg/l)	16.9	15.2	12.3	12.1	20.8	27.7	18.0
SS (mg/l)	17.8	18.1	18.5	17.6	18.8	26.1	29.1

Accordingly, the Petitioner has requested effluent limitations of 30 mg/l for both BOD and and suspended solids during the

*MARCH DATA IS FOR 16 DAYS FLOW, 12 DAYS BOD, 16 DAYS SS.

**COMPOSITE SAMPLE BASED UPON WEIGHTED AVERAGING FOR 3 PLANT EFFLUENTS WITH NO TERTIARY FILTER TREATMENT.

variance period. The Agency believes that the Petitioner should be able to meet the requested effluent limitations of 30 mg/l for both BOD and SS during the variance period based upon the data submitted by the Petitioner to the Agency. (Rec. 2).

The Petitioner has stated that it intends to award the contract for modification of the drain-down water piping on April 8, 1985 and to take the tertiary filters out of service for several days while modifications are made. Several weeks after the requisite piping modification is completed, the Petitioner plans to take the tertiary filters out of service in order to extend chlorine lines to all filter cells and replace and/or add media to the filter. Before the actual work on this part of the project is performed, the Petitioner plans to meet with the manufacturer of these tertiary filters to ascertain whether to utilize the same type of media or switch to a different type. Once it determines what type of media to use, a three week bid process will ensue before the contract can be awarded and this work begun. (Rec. 3).

Although the sanitary district has previously been aware of media loss from the filters and had planned to work on this problem during this coming summer, the Petitioner was not aware that the loss of media from the filters was so extensive until various problems occurred in February, 1985. (Rec. 3). In order for the media to be replaced, the Petitioner must re-route the drain-down piping, change the nozzles, extend the chlorine piping to all filter cells, and take the filter out of service for a short period of time. To perform the previously described work, the Petitioner believes that there is no viable alternative to removing the filters from service. The Agency has noted that it "agrees with Petitioner's assessment of alternatives". (Rec. 3).

The Petitioner has estimated that it will cost at least \$70,000.00 to perform the necessary work and anticipates that the work will be completed by the latter part of April, 1985 or the early part of May, 1985. The Petitioner has asserted that denial of this requested provisional variance would cause an arbitrary or unreasonable hardship as the sanitary district would be required to meet tertiary effluent limits while being able to provide only secondary treatment. The Agency agrees with the Petitioner's contention in regard to such hardship and notes that "due to the higher stream flow and available dilution during this time of year that any adverse impact on the receiving stream will be minimal." (Rec. 3).

Accordingly, the Agency has concluded that compliance on a short-term basis with the provisions of 35 Ill. Adm. Code 304.120(c) and 304.141(a) would impose an arbitrary or unreasonable hardship upon the Petitioner. Therefore, the Agency recommends that the Board grant the Bloomington-Normal Sanitary District a provisional variance from Sections 304.120(c) and 304.141(a) for a period of 45 days, subject to certain conditions.

Pursuant to Section 35(b) of the Illinois Environmental Protection Act, the Board hereby grants the provisional variance as recommended.

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

ORDER

The Bloomington-Normal Sanitary District is hereby granted a provisional variance from 35 Ill. Adm. Code 304.120(c) and 35 Ill. Adm. Code 304.141(a), subject to the following conditions:

1. This provisional variance shall commence when the tertiary filters are first taken out of service and continue for 45 days, or until the work on the media of the tertiary filters is completed, whichever occurs first.

2. The Petitioner shall apply for any permits required for this work.

3. The Petitioner shall sample the secondary effluents and perform laboratory analyses on the samples at the same type and frequency as specified in NPDES Permit No. IL0027731. The analytical results for each sample, along with the weighted average, shall be incorporated into a table and submitted to the Agency with the monthly discharge monitoring reports.

4. During the period of this variance, the effluent discharged shall be limited to 30 mg/l for both BOD and SS based upon a weighted average of all three discharges.

5. The Petitioner shall chlorinate the secondary effluent from each of the three treatment facilities.

6. The Petitioner shall notify Mr. Roger Cruse of the Agency's Compliance Assurance Section via telephone at 217/782-9720 each time the tertiary filters are removed from service and each time they are placed back in service. Written notification confirming each telephone notification shall be submitted within 5 days thereof to:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
2200 Churchill Road
Springfield, Illinois 62706
Attention: Mr. Roger Cruse

7. Within 10 days after meeting with the tertiary filter manufacturer's representative(s), the Petitioner shall submit to the Agency a report containing the decision(s) reached regarding the type(s) of media to be used in the filter, as well as an

outline of the scope of work which will be performed on the filters. Such notification shall be sent to Mr. Roger Cruse as indicated above.

8. The Petitioner shall operate and maintain the wastewater treatment facilities so as to produce the best effluent practicable.

9. Within 10 days of the date of the Board's Order, the Petitioner shall execute a Certificate of Acceptance and Agreement which shall be sent to the Agency at the address specified in item #6 of this Order.

This certification shall have the following form:

I, (We) _____, having read the Order of the Illinois Pollution Control Board in PCB 85-34 dated March 22, 1985, understand and accept said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

Petitioner

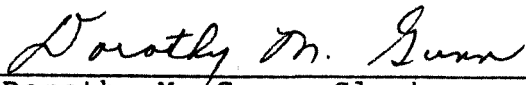
By: Authorized Agent

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 22nd day of March, 1985 by a vote of 6-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board