

ILLINOIS POLLUTION CONTROL BOARD  
December 3, 1987

CITY OF DELAVAN, )  
 )  
 Petitioner, )  
 )  
 v. ) PCB 87-137  
 )  
 ILLINOIS ENVIRONMENTAL )  
 PROTECTION AGENCY, )  
 )  
 Respondent. )

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

This matter comes before the Board on Petitioner's September 18, 1987 Petition seeking a 3 month variance from Illinois NPDES Effluent Standards. [35 Ill. Adm. Code Section 304.141, Section 304.120] and IEPA's Motion To File Agency Recommendation Instanter, filed November 3, 1987.

Petitioner, the City of Delavan, Tazewell County, Illinois is a municipal corporation with a population of 1,973. Petitioner provides sewage collection and treatment to 2,000 people, with improvements designed for 2300. Sewage collection is provided by a separate sanitary sewer system, and treatment is currently provided by a single-cell pond system. The small cell pond, which is designed to handle a design average flow [DAF] of 250,000 gallons/day, is in need of upgrading. The sewer system tributary to the treatment plant is subject to surcharging and basement back-ups, causing Petitioner to be placed on restricted status on December 14, 1979. Agency Rec. pp. 2-3.

The existing, single cell, waste stabilization pond has a surface area of 15.5 acres and a volume of approximately 17 million gallons. This single cell system is proposed to be upgraded and augmented by the construction of a four (4) acre second cell, rock filter, and a chlorine contact tank. Upon completion of the project, treatment will be by large cell, small cell, rock filter and chlorination. Petitioner has already received permits to construct the new, four (4) acre pond. Construction bids were due before September 17, 1987 and awarding of contracts was expected shortly thereafter. However, as a part of the project, the existing pond must temporarily be taken out of service. Pet. p. 3.

During the time when the original pond is out of service, there will be discharges into nearby Crane Creek. From April 21, 1988 to May 1, 1988, 1 million gallons per day of effluent will

be discharged. From May 7, 1988 to May 18, 1988, approximately 700,000 gallons per day will be discharged. This discharge will consist of 500,000 gallons/day transferred from the larger, older pond and 200,000 gallons/day of raw sewage; however, prior to discharge this flow will be treated by the small pond, rock filter and chlorination. From May 15, 1988 to June 30, 1988, approximately 200 gallons/day will be discharged. This will also receive treatment consisting of small pond, rock filter chlorination. Pet. p. 3.

Petitioner claims that during the construction period current effluent standards cannot be met because the existing pond must be taken out of service for repairs. Pet. p. 3, par. 'E'.

#### COMPLIANCE PLAN

As noted above, Petitioner's Compliance Plan includes construction of a second lagoon cell, rock filter, and a chlorination unit. When these are completed, raw sewage flows and water from the dewatering of the first cell will be diverted to the second cell. IEPA has approved of the proposal [Agency Recommendation p. 3] which incorporated the following work schedule:

September 17, 1987	Construction bids received.
November 1, 1987	Construction of pumping station, forcemain, small pond, rock filter and chlorination unit begins.
April 21, 1988	Drain large pond down 1.4 feet.
May 1, 1988	Construction work completed. Finish draining large pond down 1.4 feet. Begin transfer from large pond to small pond.
May 7, 1988	Finish small pond filling.
May 15, 1988	Draining of large pond is completed. Begin reshaping of earthen berms on large pond.
June 30, 1988	Completion of earthwork. Begin filling large pond with raw sewage. Implace riprap during refilling.

[Pet. p. 2].

ENVIRONMENTAL IMPACT

Petitioner is currently authorized to discharge under NPDES Permit No. IL 0028355, issued on April 4, 1983. Interim limits are 40/75 mg/l BOD<sub>5</sub>/TSS [monthly average], with final limits of 30/37 mg/l BOD<sub>5</sub>/TSS (monthly average). As the data below demonstrates, the current facility is incapable of producing consistently acceptable effluent levels. The following data was reported by Petitioner on its discharge monitoring reports [DMRs] for the previous year:

<u>Month</u>	<u>Average Flow-MGD</u>	<u>Average BOD<sub>5</sub> mg/l</u>	<u>Average TSS mg/l</u>
8/87	0.15	43	190
7/87	0.17	28	210
6/87	0.17	20	130
5/87	0.17	45	110
4/87	0.14	36	77
3/87	0.13	42	64
2/87	0.13	24	60
1/87	0.13	11	9
12/86	0.18	20	35
11/86	0.18	13	32
10/86	0.18	11	67
9/86	0.14	30	180
Average Limit:	0.155	27.0 40	97.0 75

There is no reason to believe these conditions have improved. In the Agency Recommendation prepared for submission in PCB 82-86, Petitioner was discharging 28/52 mg/l BOD<sub>5</sub>/TSS. In reviewing the receiving streams the Agency said the following: "Concerning Crane Creek, this investigation found unbalanced conditions upstream from Petitioner, while downstream from Petitioner's outfall, polluted and "semi-polluted" conditions were found. Stream quality improved to "unbalanced" within 2 miles from the outfall." Agency Rec. p. 5.

Crane Creek, the receiving stream, is intermittent and tributary to several channelized drainage ditches. Diversity in such streams is extremely limited. Crane Creek is unchannelized for approximately 3 miles downstream of Petitioner's discharge.

According to the terms of the proposed variance, although BOD<sub>5</sub> would be raised, the TSS level would remain at its current level. Agency Rec. p. 5. Discharge of effluent from this treatment plant is to an intermittent stream which does not support fish life; there should be minimal effects on human, animal and plant life. Pet. p. 4. The IEPA has stated that the proposed variance will result in little additional adverse impact

on the receiving streams owing to the short duration of the variance. Agency Rec. p. 6.

#### HARDSHIP

Petitioner stated that construction of temporary holding pond would cost approximately \$207,000. Pet. p. 4. \$2,092,681 is the projected cost of the proposed upgrading of the plant and sewer system, of which \$1,471,932 will be funded by grants. Agency Rec. p. 6. Thus, Petitioner must pay \$620,749 from its own sources of funds. Requiring Petitioner to construct the temporary holding ponds would be unreasonable, especially since a temporary holding pond is unnecessary and not needed for final operation.

#### CONCLUSION

For the foregoing reasons, and in consideration of the small adverse environmental impact, the Board finds that denial of the requested variance would impose an arbitrary or unreasonable hardship.

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

#### ORDER

The Agency's Motion To File Recommendation Instanter is granted.

Petitioner, City of Delavan, is hereby granted a variance from Illinois NPDES Effluent Standards [35 Ill. Adm. Code Section 304.141 Section 304.120] subject to the following conditions:

1. Variance shall begin when the old pond is removed from service.
2. Variance shall expire July 1, 1988.
3. While dewatering the old pond, Petitioner shall not discharge sludges or bottom deposits to either the new pond or the receiving stream.
4. Petitioner shall notify IEPA of the dewatering of the old pond at least 24 hours prior to commencement of dewatering. Petitioner shall contact IEPA's Regional Office at (309) 693-5463.
5. Follow-up, written notification of the dewatering shall be submitted within 5 days to:

Illinois Environmental Protection Agency  
DWPC, Region II  
5415 N. University Avenue  
Peoria, Illinois 61614

- 7. During the time the variance is in effect, Petitioner shall monitor its effluent for BOD<sub>5</sub> and TSS every two weeks. These results shall be reported on Petitioner's DMRs.
- 8. Petitioner shall operate its sewer treatment facilities so as to produce the best treatment possible.
- 9. During the term of the variance, Petitioner shall meet the following effluent limits:

BOD <sub>5</sub>	50 mg/l	Monthly Average
TSS	100 mg/l	Monthly Average

- 10. Within 45 days of the granting of the variance by the Board, Petitioner shall execute and submit a Certificate of Acceptance agreeing to be bound to the terms and conditions of the variance and shall mail it to:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Compliance Assurance Section  
2200 Churchill Road  
P.O. Box 19276  
Springfield, Illinois 62794-9276.

I, (We), The City of Delavan, having read the Order of the Illinois Pollution Control Board in PCB 87-137, dated December 3, 1987, understand and accept said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

\_\_\_\_\_  
Petitioner

\_\_\_\_\_  
Title

\_\_\_\_\_  
By: Authorized Agent

\_\_\_\_\_  
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 31<sup>st</sup> day of December, 1987 by a vote of 7-0.

Dorothy M. Gunn, C.A.  
Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board