

ILLINOIS POLLUTION CONTROL BOARD  
August 18, 1983

METROPOLITAN SANITARY DISTRICT )  
OF GREATER CHICAGO, )  
 )  
Petitioner, )  
 )  
v. ) PCB 83-110  
 )  
ILLINOIS ENVIRONMENTAL PROTECTION )  
AGENCY, )  
 )  
Respondent. )

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

This provisional variance request comes before the Board upon an August 17, 1983 Recommendation of the Illinois Environmental Protection Agency (Agency). The Agency recommends that a 45-day provisional variance be granted to the Metropolitan Sanitary District of Greater Chicago (MSDGC) to allow it to bypass raw and primary treated wastewater during construction at its Calumet sewage treatment plant (STP).

The MSDGC owns and operates 7 wastewater treatment plants that serve about 5.4 million people in the City of Chicago and nearby communities. The Calumet STP, which serves approximately 1,082,000 people and various industries, is an activated sludge wastewater treatment plant which provides chlorination prior to its discharge to the Little Calumet River. (Rec. 1).

The Petitioner is in the process of constructing additional secondary treatment facilities under MSDGC Contract No. 77-284-2P pursuant to Agency Permit No. 1981-AB-1927. At the Calumet STP, there are multiple contracts (requiring an Agency construction permit for each contract) pertaining to expansions and improvements of preliminary treatment, first stage secondary treatment, second stage treatment (nitrification), and other miscellaneous related facilities. (Rec. 2). It is anticipated that, upon completion of the requisite expansions and improvements, an additional flow of 134 million gallons per day will be treated. (Rec. 2).

The construction work in progress, which is expected to be completed by March of 1986, includes the cleaning of lagoons 10 and 11, constructin of 10 aeration tanks and 20 final settling tanks, operating gallery, tunnel and miscellaneous chambers, chlorination facilities, effluent conduits, and other similar improvements. (Rec. 2).

It is necessary for the MSDGC to obtain access in the effluent conduit in order to complete a portion of the construction process. The Petitioner must install a temporary bulkhead in the effluent conduit in order to complete this work. Flow can be rerouted so that secondary treatment can be provided (once the temporary bulkhead is constructed). During the interval of time that the bulkhead is being constructed, and while it is being demolished, the entire effluent conduit must be dewatered. Such dewatering will result in a shutdown of influent wastewater into the activated sludge portion of the Petitioner's treatment system. (Rec. 2).

To handle these contingencies, the MSDGC is proposing to provide primary treatment to between 40 and 80 million gallons of wastewater per day before discharging to the Little Calumet River. Additionally, the MSDGC plans to store the wastewater in interceptors for as long as possible before bypassing to the Little Calumet River. Bypassing of untreated wastewater will occur even with these proposed measures being taken, because flows to the Calumet STP average about 220 million gallons per day. The installation and the demolition of the bulkhead are each estimated by the MSDGC to take from 12 to 24 hours to accomplish and the resulting bypass will occur during these two time periods. (Rec. 3).

The MSDGC has asserted that, during the period of the bypasses, it will maintain the maximum amount of treatment possible under the circumstances in order to minimize any potentially adverse environmental impact. The MSDGC alleges that there are no other economically feasible alternatives other than to bypass during this construction period and notes that each plant shutdown will be done when there is minimal flow to the plant and no foreseeable rainfall. Since the MSDGC is providing primary treatment to as much flow as possible, storing flow within the interceptors, and doing its construction work primarily at night and during low flow periods, the Petitioner feels that it is taking all reasonable steps necessary to protect the environment. (Rec. 3).

In its Recommendation, the Agency has concurred with the Petitioner that no other economical alternatives exist to avoid bypassing during the two days that the MSDGC is constructing and demolishing the bulkhead. (Rec. 3).

The Agency has concluded that compliance on a short-term basis with the provisions of 35 Ill. Adm. Code 306.305 would impose an arbitrary or unreasonable hardship. Therefore, the Agency recommends that the Board grant the MSDGC a provisional variance from Section 306.305 for a period of 45 days beginning August 18, 1983, subject to certain conditions.

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

ORDER

The Metropolitan Sanitary District of Greater Chicago is hereby granted a provisional variance from 35 Ill. Adm. Code 306.305 for a period of 45 days beginning August 18, 1983, subject to the following conditions:

1. That bypassing occur no more than 2 times during the 45 day variance period and that each bypass occurrence lasts no more than 24 hours.
2. That the construction and demolition of the bulkhead begin no earlier than 10:00 p.m. and that the work is accomplished in the shortest period of time possible.
3. That the construction and demolition of the bulkhead not occur during or immediately following wet weather.
4. That the maximum amount of flow possible be given primary treatment before any bypassing of untreated wastewater occurs.
5. That the influent interceptors be utilized to their maximum for storage before any bypassing of untreated wastewater occurs.
6. That Petitioner notify Robert E. Broms, P.E., Manager, Compliance Assurance Section, Division of Water Pollution Control at 217/782-9720:
  - a. when construction of the bulkhead begins;
  - b. when construction of the bulkhead is completed and bypassing ceases;
  - c. when demolition of the bulkhead begins;
  - d. when demolition of the bulkhead is completed and bypassing ceases;
  - e. as to the quantity of wastewater receiving primary treatment and the quantity bypassed untreated during each shutdown.
7. 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: Illinois Environmental Protection Agency, Division of Water Pollution Control, Compliance Assurance Section, 2200 Churchill Road, Springfield, Illinois 62706. This certification shall have the following form:

CERTIFICATION

I, (We) \_\_\_\_\_,  
having read the Order of the Illinois Pollution Control Board in  
PCB 83-110 dated August 18, 1983, 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.

Chairman Dumelle concurred.

I, Christan L. Moffett, Clerk of the Illinois Pollution  
Control Board, hereby certify that the above Opinion and Order  
was adopted on the 18<sup>th</sup> day of August,  
1983 by a vote of 5-6.

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