

of the treatment processes. Thus, if an electrical problem develops in only one area of the WWTP, it will not result in a loss of electric power to the entire plant. Additionally, the inspection, repair, and sealing of electrical connections should result in an improved system with a reduced frequency of high voltage electrical problems. (Rec. 2).

The Agency has stated that Granite City has requested "...up to 96 clock hours of treatment works bypassing of raw sewage to the river." (Rec. 2). During the time period that electrical power is shut off to the raw sewage pumping station and to the combined overflow pumping station, it will be necessary to bypass raw sewage into the Mississippi River. Granite City has indicated that bypassing will occur only when work is actually being done on the electrical system in order to minimize the length of time that such bypassing occurs. The electric power will be turned back on after work is done for the day. (Rec. 2).

The Petitioner, which discharges effluent pursuant to NPDES Permit No. IL0033481, has requested that its NPDES Permit limitations for biochemical oxygen demand (BOD) and total suspended solids (TSS) be revised during the variance period to allow for poorer quality effluent due to the anticipated interruption in electric power. (Rec. 2-3). Granite City has stated that the aeration process will be out of service no more than eight hours per day over two consecutive days under its proposed schedule for performing the necessary electrical work. This schedule is designed to reduce the stress on the microorganisms in the activated sludge process and will also help to minimize any deleterious effects on the effluent. (Rec.3). Moreover, because of the expected high dilution involved, the effects on the receiving stream of raw sewage bypassing and any reduced effluent quality during the time period that the electrical repair work and cutout installation is being done will be minimized.

Granite City has considered various alternatives to turning off the electrical power to the treatment facility while the electrical work is being done. These alternatives include: (1) doing the repair work with the system "hot"; (2) doing the work as part of future grant-funded construction; or (3) providing portable generators or other sources of power during the time period that the electrical work is being performed. The Agency agrees with Granite City's contention that, because of safety considerations for both its employees and equipment, the first two alternatives are "intolerable". (Rec. 3). The Agency has stressed that working "hot" with over 4,000 volts of electricity is extremely dangerous and would subject the city's personnel to unconscionable risks. Furthermore, to do the work as part of future grant-funded construction would put off the necessary repairs for at least a year and result in an unreasonable delay. As the Agency states, "the problems which have occurred are better solved now than at some point in the future." (Rec. 3).

The third alternative is not technically feasible because the plant equipment is not equipped to be hooked up to portable generators and all the electrical power comes into the WWTP via the line which the city will be working on. Although the treatment plant is supplied by two separate lines from the power company so there is a backup power source, there is only one line distributing the power within the WWTP.

The Agency believes that the provisional variance is appropriate because it will allow the Petitioner to correct problems which result in unsafe conditions and contribute to the unreliable operation of the WWTP. The Agency has emphasized that the "Petitioner could have decided to wait for grant monies to correct these problems, but has instead decided to correct them now using its own money." (Rec. 4). Accordingly, the Agency believes that the denial of the provisional variance would impose an arbitrary or unreasonable hardship on Granite City.

Thus, the Agency recommends that the Board grant the City of Granite City a provisional variance from Sections 304.105 and 304.141, 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 City of Granite City is hereby granted a provisional variance from 35 Ill. Adm. Code 304.105 and 35 Ill. Adm. Code 304.141 to allow the bypassing of raw sewage into the Mississippi River during the period of time when the city repairs the high voltage electrical distribution system in its wastewater treatment plant, subject to the following conditions:

1. The variance shall be for a period of 45 days which shall commence no later than May 1, 1984.
2. The Petitioner shall notify Bonnie DeLay of the Agency's Compliance Assurance Section by telephone when the work on the high voltage power distribution system is begun.
3. The Petitioner shall notify Bonnie DeLay by telephone of the time(s) raw sewage bypassing to the river is commenced and of the time(s) such bypassing is stopped. In addition, the Petitioner shall sample the bypassed sewage a minimum of one (1) time per bypass occurrence or one (1) time per each eight (8) hours of continuous bypass. Such samples shall be analyzed for BOD and TSS.
4. During the periods when work is being done on the electrical system for the activated sludge process, the

incoming wastewater shall be held in the stormwater tank and processed when power has been restored to the activated sludge process. The activated sludge process shall be off for no more than eight (8) hours per day for no more than two (2) days consecutively.

5. The Petitioner shall meet the following BOD and TSS effluent limitations:

	<u>Concentration Limits (mg/l)</u>		<u>Load Limits (lbs/day)</u>	
	<u>30 Day Avg.</u>	<u>Daily Max.</u>	<u>30 Day Avg.</u>	<u>Daily Max.</u>
BOD	100 mg/l	150 mg/l	9,175 lbs/day	14,385 lbs/day
TSS	100 mg/l	150 mg/l	9,175 lbs/day	17,838 lbs/day

6. The Petitioner shall notify Bonnie Delay by telephone when all work to the high voltage power distribution system is completed.

7. The Petitioner shall operate and maintain the treatment facility in such a manner so as to obtain the best quality effluent possible.

8. Within fifteen (15) days after completion of the repairs to the electrical system, the Petitioner shall submit a report summarizing the actions taken to repair the electrical system including, but not limited to:

- a) the date, time and duration of each bypass event;
- b) a summary of associated analytical test results; and
- c) the dates on which the repair project began and concluded.

9. Within 10 days of the date of the Board's Order, the City of Granite City 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 84-42 dated April 5, 1984, understand and accept the 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, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 5th day of April, 1984 by a vote of 6-0.

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