ILLINOIS POLLUTION CONTROL BOARD November 2, 2000

IN THE MATTER OF:)	
)	
PETITION OF THE CITY OF SYCAMORE FO	RAN)	AS 01-5
ADJUSTED STANDARD FROM 35 ILL. ADM.	CODE)	(Adjusted Standard - Water)
304.121 AND 35 ILL. ADM. CODE 306.305(b))	
)	

ORDER OF THE BOARD (by N.J. Melas):

On September 25, 2000, the City of Sycamore (Sycamore) filed this petition for an adjusted standard pursuant to Section 28.1 of the Environmental Protection Act (Act). 415 ILCS 5/28.1 (1998). Sycamore requests that the Board grant an adjusted standard from 35 Ill. Adm. Code 304.121 and 306.305(b). Section 304.121 of the Board's regulations applies to bacteria in the effluent from Sycamore's waste water treatment plant (WWTP), and Section 306.305(b) applies to treatment of Sycamore's stormwater discharges and WWTP bypasses. Sycamore is located in DeKalb County, Illinois. The WWTP discharges into the Kishwaukee River (Kishwaukee). The WWTP includes an excess flow treatment facility (EFTF). The EFTF does not have disinfection. In applying for an adjusted standard, Sycamore seeks to avoid the requirement to install a disinfection system for the EFTF. Pet. at 1-3.

NOTICE AND HEARING

Section 28.1 of the Act (415 ILCS 5/28.1 (1998)) and 35 Ill. Adm. Code 106.711 require publication of a notice of an adjusted standard proceeding in a newspaper of general circulation in the area affected by the petitioner's activity. The notice must be published within 14 days of the filing of the petition. As required by the 35 Ill. Adm. Code 712, Sycamore filed a certificate of publication with the Board on October 20, 2000, indicating that notice of the petition was published in *The Daily Chronicle* on October 6, 2000.

The Board finds that the notice meets the requirements of Section 28.1 of the Act and 35 Ill. Adm. Code 106.711 and 106.712.

PROOF AND INFORMATIONAL SUFFICIENCY

Although the notice is proper, the Board finds that the petition has not adequately addressed certain proof required by Section 28.1(c) of the Act and certain information sufficiency requirements required by the Board's rules at 35 Ill. Adm. Code 106.705. Specifically the petition fails to provide:

- 1. Factors relating to the petitioner that are substantially and significantly different from the factors relied upon by the Board in adopting the general regulation applicable to that petitioner. 415 ILCS 5/28.1(c)(1) (1998). These factors are not specifically addressed in the petition.
- 2. Adequate proof that the requested standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting the rule of general applicability. 415 ILCS 5/28.1(c)(3) (1998).

Similarly, the petition fails to provide the quantitative and qualitative impact of the petitioner's activity on the environment, with and without the adjusted standard, including (a) cross-media impacts concerning environmental subject areas other than those addressed by the regulation of general applicability and the proposed adjusted standard; and (b) the nature of emissions, discharges or releases. 35 Ill. Adm. Code 106.705(g).

a. Fecal coliforms/bacteria

Sycamore states it has received an exemption from disinfection treatment for its dry weather flows from the Illinois Environmental Protection Agency (Agency) pursuant to 35 Ill. Adm. Code 304.121(b). Pet. at 6. This exemption requires Sycamore to demonstrate the character of the receiving waters and that its discharge will not cause downstream waters to exceed applicable fecal coliform water quality standards. See 35 Ill. Adm. Code 302.209.

Receiving waters are exempt from the 200 coliforms/100 mL water quality standard at 35 Ill. Adm. Code 302.209 if the Agency (under its National Pollutant Discharge Elimination System (NPDES) permit granting authority) determines the receiving waters are considered unable to support primary contact uses because of physical, hydrologic or geographic configuration and are located in areas unlikely to be frequented by the public on a routine basis.

Sycamore states that the only recreational use of the East Branch of the Kishwaukee is for fishing (Pet. at 8-9) but then states that there is "no recreational contact in the receiving stream." Pet. at 10. Sycamore must provide clarification on this point, as there appears to be confusion regarding the Kishwaukee's ability to support primary conduct. Fishing may indicate boating and wading which pose a concern for human health. In order to clarify any confusion, Sycamore must conduct a survey to determine the use of the receiving stream and the degree of human exposure to bacteria. Sycamore must be more specific in describing the fishing, including the frequency of fishing, the number of persons engaged in fishing, and the types of fish caught. Sycamore should also describe other activities that might be affected by the water quality in the Kishwaukee.

Since Sycamore claims that the Agency has already exempted Sycamore's dry weather flows from the disinfection requirements of 304.121, the Agency apparently considered the Kishwaukee segment downstream of the WWTP not protected for primary contact use. Therefore, Sycamore states there are no water quality standards for fecal coliform in the Kishwaukee downstream of the WWTP. Sycamore must provide proof (either by submitting its NPDES permit or other documentation) that there are no fecal coliform water quality standards for this stretch of the Kishwaukee.

Sycamore claims that samples taken upstream of the WWTP and at a sampling point 1.5 miles downstream of the WWTP do not generally indicate an increase in fecal coliform levels during the same storm events. Pet. at 10, Exh. 1. However, the data shows that fecal coliform counts in the EFTF effluent can be relatively high, as much as 3 to 21 times higher than fecal coliform counts in water samples taken upstream of the WWTP. *Id.* Therefore, Sycamore must provide fecal coliform counts between the WWTP and the sampling point 1.5 miles downstream.

Sycamore states that there are no water quality standards for fecal coliform along "that segment" of the Kishwaukee River. Pet. at 10. It is unclear where "that segment" begins and ends. Fecal coliform analysis is provided for the effluent, Martin's Ditch, and the East Branch of the Kishwaukee, but no data is provided for the receiving waters further downstream that have water quality standards for fecal coliform. To demonstrate that the adjusted standard will not have a negative impact on the receiving waters further downstream where water quality standards are applicable, Sycamore must clarify what portion of the receiving stream is exempt from the water quality standards for fecal coliform and provide fecal

coliform analysis for waters immediately downstream where water quality standards are applicable.

b. Disinfection

Sycamore must submit scientific data or biological studies to support its conclusion that a disinfection system for the EFTF would have a negative impact on aquatic life. The study or data must predict the impact of a chlorine residual in the effluent from the EFTF. The studies or data must compare the health of aquatic life during normal plant operation to overflow events.

3. Whether the regulation of general applicability was promulgated to implement the requirements of the Clean Water Act (CWA) or the NPDES. 35 Ill. Adm. Code 106.705(b). Although there are no Federal standards for disinfection of wastewater discharge from combined sewer overflows (CSO), the regulation of general applicability (35 Ill. Adm. Code 304.121) was promulgated to implement the requirements of the CWA and NPDES. Fecal coliforms are identified as "conventional pollutants" under the CWA at 33 U.S.C. § 1314(a)(4) (1998).

In addition, Sycamore must indicate if its NPDES permit requires completion and implementation of a long-term CSO control plan (plan) as required under the U.S. Environmental Protection Agency's CSO Control Policy (policy). The policy's goal is to bring CSOs into full compliance with the CWA. See 59 Fed. Reg. 18,688 (1994). If Sycamore is completing or implementing a plan, Sycamore must indicate how the control plan affects its petition. If Sycamore is not subject to a plan in its NPDES permit, the Agency must indicate why. (See item 5d.)

- 4. A description of the nature of the petitioner's activity which is the subject of the proposed adjusted standard, including the location of and area affected by the petitioner's activity, number of persons employed by the petitioner's facility, age of that facility, relevant pollution control equipment already in use, and the qualitative and quantitative nature of emissions, discharges or releases currently generated by the petitioner's activity. 35 Ill. Adm. Code 106.705(d). Sycamore's petition states that area affected is the East Branch of the Kishwaukee. Sycamore must change this to indicate that the area affected is actually the East Branch of the South Branch of the Kishwaukee. Sycamore must also indicate the age of the WWTP.
- 5. A complete description of the efforts which would be necessary if petitioner were to comply with the regulation of general applicability. 35 Ill. Adm. Code 106.705(e). Sycamore only provides one compliance alternative and corresponding cost estimate. Sycamore must provide a cost/feasibility analysis for the following alternatives:
 - a. Separating storm sewers from the sanitary sewer system on a selective basis by making system upgrades where feasible and economical, by requiring new developments to install separate sewer systems or stormwater retention, and by utilizing a program of stormwater permit fees to address stormwater management needs for Sycamore's infrastructure.
 - b. Identifying existing large commercial/industrial/residential developments that contribute heavily to stormwater runoff, and evaluating the feasibility of requiring developers to construct stormwater retention ponds to reduce the rate of flow to the WWTP. Obviously, such an option is only viable where there is sufficient space at a development for construction of a detention pond.

- c. Using sodium hypochlorite instead of chlorine for disinfection. Sodium hypochlorite would avoid the safety concerns of storing chlorine incylinders. Sycamore also must provide information on construction of a climate-controlled storage facility to maintain the useful life of sodium hypochlorite.
- d. Developing or implementing a long term CSO Control Plan consistent with USEPA policy. (See item 3.)

Sycamore must provide corresponding costs, overall capital costs, and annualized capital and operating costs for each compliance alternative. If Sycamore determines that a compliance alternative is technologically unfeasible and does not warrant a cost analysis, it must provide an adequate explanation of the technological barriers.

6. How the petitioner seeks to justify the proposed adjusted standard. 35 Ill. Adm. Code 106.705(h). In order for the Board to consider justification, Sycamore must provide the information that the Board has requested above.

CONCLUSION

The Board therefore directs petitioner to address the information requirements of Section 28.1 of the Act and Section 106.705 of the Board's rules in an amended petition. The amended petition must be filed with the Board by January 5, 2001, or it will be dismissed.

If petitioner files the amended petition by January 5, 2001, the Board will accept this matter for hearing. The Agency shall file a response to the amended petition within 30 days after it is filed with the Board. See 35 Ill. Adm. Code 106.714(a).

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above order was adopted on the 2nd day of November 2000 by a vote of 7-0.

Dorothy Mr. Aur

Dorothy M. Gunn, Clerk Illinois Pollution Control Board