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ORIGINAL

March 1, 2002

**RECEIVED**  
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MAR 5 - 2002

STATE OF ILLINOIS  
Pollution Control Board

Illinois Pollution Control Board  
Attn: Dorothy Gunn, Clerk, re Docket R02-11  
James R. Thompson Center  
100 West Randolph Street, Suite 11-500  
Chicago, Illinois 60601

*P.C. #8*

RE: Support for IEPA Carbonaceous BOD Proposal  
Before the IPCB

Dear Ms. Gunn:

The use of carbonaceous BOD as a parameter for measuring the efficiency of secondary treatment processes has been a standard for many decades. Also, the concern of interference from nitrogenous compounds in the BOD-5 test has been a concern traceable in literature from the 1930s. It has further been demonstrated that while the nitrogenous interference is sufficiently high to need correction, it is nevertheless a small portion of the total BOD from nitrogenous compounds.<sup>1</sup> Consequently, in 1984 the USEPA authorized the use of CBOD for determining secondary treatment process efficiencies.

In general, treatment plants strive for the highest efficiency and, therefore, the lowest CBOD effluent that their individual processes can achieve. Typical CBOD effluents range from 3 to 9 mg/l. It is the District's belief it is not necessary to deviate from IEPA's suggested CBOD parameters. The BOD tests by their very nature, have a large standard deviation. For example, a final effluent CBOD of 6 mg/l could easily have a standard deviation of plus or minus 2 or a range from 4 to 8 mg/l and, therefore, statistically all numbers between 4 and 8 are the same as the mean of 6.

It is further suggested that rather than reduce the limits suggested by IEPA, the Board may consider an approach of setting warning limits or limits that would rather than trigger compliance enforcement, initiate investigations by the POTWs into the reasons for the higher-than-usual reported values. As example, the warning limit could be triggered when a POTW discharges CBOD above the 80<sup>th</sup> percentile of standard.

<sup>1</sup> Chemistry for Sanitary Engineers published 1960, Clare N. Sawyer, Chapter 23

In conclusion, it is the District's position that the standards as proposed by the IEPA for carbonaceous BOD are adequate and fully protective of the environment. Treatment plants strive to do the most efficient job of treatment that their individual processes will allow. Last, the Board may wish to consider a standard with warning limits to trigger actions at the POTWs.

Thank you for your consideration in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Dean Falkner", with a long, sweeping underline.

Dean Falkner  
District Director