

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

ORIGINAL

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CLERK'S OFFICE
FEB 15 2002
STATE OF ILLINOIS
Pollution Control Board

IN THE MATTER OF:)
)
WATER QUALITY TRIENNIAL REVIEW)
AMENDMENTS TO 35 ILL. ADM. CODE)
302.208(e)-(g), 302.504(a),)
302.575(d), 303.444, 309.141(h);)
AND PROPOSED 35 ILL. ADM. CODE)
301.267, 301.313, 301.413,)
304.120 AND 309.157)

R02-11
(Rulemaking-Water)

P.C. #1

NOTICE OF FILING

TO: SEE ATTACHED SERVICE LIST.

PLEASE TAKE NOTICE that on Tuesday, February 15, 2002, we filed the attached **Comments of the Metropolitan Water Reclamation District of Greater Chicago** with the Clerk of the Pollution Control Board, a copy of which is herewith served upon you.

METROPOLITAN WATER RECLAMATION
DISTRICT OF GREATER CHICAGO

BY: *Michael G. Rosenberg*
Michael G. Rosenberg, its Attorney

Michael G. Rosenberg/Ronald M. Hill
Metropolitan Water Reclamation
District of Greater Chicago
100 East Erie Street
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(312) 751-6583

CERTIFICATE OF SERVICE

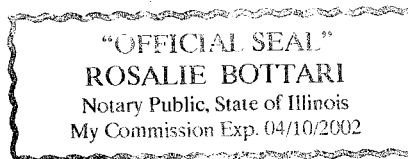
I, *Cheeryl Bourgeois*, being duly sworn on oath, certify that I caused a copy of the attached **Comments of the Metropolitan Water Reclamation District of Greater Chicago** to be sent via first class U.S. Mail to the individuals identified on the attached service list their addresses as shown, with proper postage prepaid, from 100 E. Erie Street, Chicago, Illinois, at or near the hour of 4:00 p.m., this 15th day of February, 2002.

Cheeryl Bourgeois

SUBSCRIBED and SWORN to before
me this 15th day of FEBRUARY, 2002.

Rosalie Bottari
Notary Public

RH:me



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STATE OF ILLINOIS
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| IN THE MATTER OF: |) | |
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| WATER QUALITY TRIENNIAL REVIEW |) | R02-11 |
| AMENDMENTS TO 35 ILL. ADM. CODE |) | (Rulemaking-Water) |
| 302.208(e)-(g), 302.504(a), |) | |
| 302.575(d), 303.444, 309.141(h); |) | |
| AND PROPOSED 35 ILL. ADM. CODE |) | |
| 301.267, 301.313, 301.413, |) | |
| 304.120 AND 309.157 |) | |

COMMENTS OF THE METROPOLITAN WATER
RECLAMATION DISTRICT OF GREATER CHICAGO

The Metropolitan Water Reclamation District of Greater Chicago ("District") submits the following comments in support of the proposed amendment to 35 Ill. Adm. Code 304.120. The District reserves the right to submit additional comments on any of the amendments being considered herein at the close of testimony in the event the Board authorizes such comments.

The Illinois Environmental Protection Agency ("Agency") is proposing to amend 35 Ill. Adm. Code 304.120 of the Board regulations by adding a Paragraph (g) which specifies that compliance with the 5-day biochemical oxygen demand (BOD₅) numerical standards in Section 304.120 be determined by analysis of 5-day carbonaceous biochemical oxygen demand (CBOD₅).

The District supports this proposed amendment to Section 304.120. The generally accepted definition of the purpose of secondary treatment for municipal wastewater treatment plants is to remove suspended solids and biodegradable organic matter (carbonaceous material) from wastewater, to a specified level of quality. Historically, the BOD₅ test was the accepted measure of biodegradable organic matter in wastewater, and the concentration of BOD₅ in an effluent was the measure of the efficiency of the secondary treatment process.

In recent years, a significant body of research has demonstrated that the traditional BOD₅ test actually measures two types of deoxygenating wastes, carbonaceous material and ammonia-

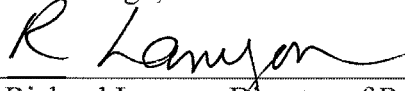
nitrogen. The ammonia-nitrogen exerts a so-called nitrogenous demand (NOD) when it is biologically converted to nitrate-nitrogen through bacterial action. Research has also conclusively shown that this NOD contribution to the traditional BOD₅ test can be highly variable depending on a variety of circumstances regarding the wastewater sample and treatment plant operations. This, in some cases, can result in the traditional BOD₅ test producing results that do not accurately reflect the true operation of the secondary treatment process. This can lead the treatment plant operator to incorrectly assess the condition of his plant, and also can result in the Agency incorrectly assessing the operation of the plant relative to removal of carbonaceous material.

With this information in hand, researchers developed the CBOD₅ test which allows the oxygen demand due to carbonaceous material to be separated from the oxygen demand due to ammonia-nitrogen. The CBOD₅ test has been validated and accepted for use by Standard Methods for the Examination of Water and Wastewater.

By formally recognizing the use of the CBOD₅ test for measuring deoxygenating wastes under Section 304.120, the Board will be unifying its regulations with the generally accepted theories in the municipal wastewater treatment industry regarding the scientifically correct method for assessing the removal of organic matter in the secondary treatment process.

Any concerns which the Board may have regarding the removal of toxicity due to ammonia-nitrogen from municipal wastewater are handled adequately under Sections 304.105 and 304.122 of the Board's regulations.

Metropolitan Water Reclamation District
of Greater Chicago,

By: 
Richard Lanyon, Director of R&D

February 15, 2002

Metropolitan Water Reclamation
District of Greater Chicago
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THIS FILING IS SUBMITTED ON RECYCLED PAPER