



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF RESEARCH AND DEVELOPMENT  
ENVIRONMENTAL MONITORING AND SUPPORT LABORATORY  
CINCINNATI, OHIO 45268

May 25, 1988

Mr. Roy P. McKnight  
Senior Applications Chemist  
Lachat Instruments  
10500 N. Port Washington Road  
Mequon, Wisconsin 53092

Dear Mr. McKnight:

We have concluded our review of the Lachat methods submitted with your April 13, 1988, correspondence. The following freshwater methods meet the requirements of the approved methods and are acceptable for reporting purposes as required by the National Pollutant Discharge Elimination System (NPDES) compliance monitoring program.

1. Alkalinity - #10-303-31-1A, Rev. 3/11/88, Flow Diagram 3/11/88
2. Ammonia (Phenolate) - #10-107-06-1-A, Rev. 3/29/88  
Flow Diagram 9/25/87
3. Phosphate (ortho-) - #10-115-01-1-B, Rev. 3/30/88  
Flow Diagram 4/21/87
4. Phosphate (in TKN) - #10-115-01-1-C, Rev. 3/15/88  
Flow Diagram 9/24/87

The following methods are acceptable for reporting under either the National Primary Drinking Water Regulations (NPDWR) or the NPDES compliance monitoring programs.

1. Chloride - #10-117-07-1-A, Rev. 9/25/87, Flow Diagram 8/7/86
2. pH - #10-304-24-2-B, Rev. 3/28/88, Flow Diagram 3/28/88  
#10-304-24-2-C, Rev. 3/28/88, Flow Diagram 3/24/88

The following Lachat methods, using 50% synthetic seawater carrier, are acceptable for NPDES monitoring of brackish waters.

1. Ammonia (Phenolate) - #30-107-06-1-A, Rev. 3/4/88  
Flow Diagram 3/4/88  
#30-107-06-1-B, Rev. 3/4/88  
Flow Diagram 3/4/88
2. Nitrate/Nitrite - #30-107-04-1-A, Rev. 4/11/88  
Flow Diagram 3/10/88

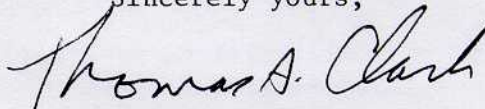
3. Phosphate (ortho-) - #30-115-01-1-A, Rev. 3/8/88  
Flow Diagram 3/8/88
4. Silica - # 30-114-27-1-A, Rev. 3/9/88, Flow Diagram 3/8/88

The following methods, using 100% synthetic seawater carrier, are acceptable for NPDES compliance monitoring of saline waters.

1. Ammonia (Phenolate) - #11-107-06-1-A, Rev. 3/29/88  
Flow Diagram 11/20/87  
#11-107-06-1-B, Rev. 3/29/88  
Flow Diagram 3/29/88
2. Nitrate/Nitrite - #11-107-04-1-A, Rev. 3/30/88  
Flow Diagram 3/30/88  
#11-107-04-1-C, Rev. 4/7/88  
Flow Diagram 1/25/88
3. Phosphorus (ortho-) - #11-115-01-1-A, Rev. 4/5/88  
Flow Diagram 6/9/86
4. Silica - #11-114-27-1-A, Rev. 4/6/88, Flow Diagram 1/19/88

Please note that approved preservation procedures must be employed when these methods are used for reporting purposes.

Sincerely yours,



Thomas A. Clark  
Acting Director  
Environmental Monitoring and Support  
Laboratory - Cincinnati

cc: Larry Lobring  
James O'Dell  
James Lichtenberg