



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
WATER

DEC 17 2004

Joseph Platano  
President  
Westco Scientific Instruments, Inc.  
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We are pleased to inform you that the Statistics and Analytical Support Branch (SASB) and the Office of Ground Water and Drinking Water's Technical Support Center (OGWDW/TSC), have determined that Westco Scientific's SmartChem Method 375-100E [Revision Date, December 29, 2003] for determination of nitrate-nitrite and nitrate in water, is an acceptable version of approved revisions of EPA Method 353.2. EPA Method 353.2 is listed at Title 40 of the *Code of Federal Regulations* (CFR) Part 136 for National Pollutant Discharge Elimination System (NPDES) wastewater monitoring, and 40 CFR 141 for National Primary Drinking Water Regulations (NPDWR) monitoring. SmartChem Method 375-100E may be used in NPDES and NPDWR compliance monitoring as described in the table below:

Parameter	Description	Approved Method Location
Nitrate	Determined by analyzing nitrate-nitrite using 375-100E, and subtract nitrite concentrations determined using SmartChem Method 380-100D [Revision Date, August 2003]	40 CFR 141, 40 CFR 136*
Nitrate-Nitrite	Determined by analyzing nitrate + nitrite using 375-100E	40 CFR 136

\* EPA Method 353.2 is not currently listed at 40 CFR 136 for determination of nitrate. However, EPA has proposed adding EPA Method 353.2 to 40 CFR 136, and previously has recommended the use of EPA Method 353.2 for determination of nitrate (by analyzing  $\text{NO}_3^- + \text{NO}_2^-$  and subtracting  $\text{NO}_2^-$ ) for this purpose. EPA's past recommendations extend to SmartChem Method 375-100E.

SmartChem Method 375-100E determines nitrate-nitrite by discrete analysis. A sample is passed through an open tubular copperized cadmium reductor to reduce nitrate to nitrite, which is measured along with nitrite previously found in the sample by diazotizing with sulfanilamide followed by coupling with N-(naphthyl)-ethylenediamine dihydrochloride to form a highly colored azo dye. The dye is measured colorimetrically at 520 nm to determine the nitrate-nitrite concentration. Nitrate is then determined by subtracting the nitrite concentration, as determined

by SmartChem Method 388-100 D [Revision Date, August 2003].

We appreciate your interest in the development of environmental monitoring methods. If you have any questions regarding the review of this alternate test procedure (Case No's D04-004 and N04-004), please contact William Telliard for wastewater inquiries (202-566-1061) or Herb Brass for drinking water inquiries (513-569-7936).

Sincerely,



William A. Telliard  
Director of Analytical Methods  
Engineering and Analysis Division (4303)



Herb Brass, Ph.D.  
Technical Support Center (MS-140)  
Office of Ground Water and Drinking Water

cc:

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