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

Antoinette C. Ruschman, President
Cardinal Laboratories, Inc.
622 Buttermilk Pike
Covington, KY 41017

JUN - 6 2001

OFFICE OF WATER

Dear Ms. Ruschman:

The Analytical Methods Staff (AMS) and the Office of Groundwater and Drinking Water (OGWDW) Technical Support Center (TSC) have reviewed the Merck KGaA methods listed below (all titled "Chlorine (Cl_2) by DPD and Photometry") to determine their equivalency to EPA-approved DPD colorimetric methods for the determination of free chlorine in drinking water (e.g., Standard Method 4500-Cl G [18th Edition]) and/or total residual chlorine in wastewater (e.g., EPA Method 330.5; Standard Method 4500-Cl G) or drinking water (e.g., Standard Method 4500-Cl G). The following table outlines the methods reviewed, the analytes determined by the method, and the ATP Case Numbers.

Method Number [Revision Date]	Analytes	ATP Case No. (wastewater)	ATP Case No. (drinking water)
1.00595Cl_2 [March 2000]	Free Cl_2		D00-0005
1.00597Cl_2 [March 2000]	Free & Total Cl_2	N00-0011	D00-0006
1.00599Cl_2 [March 2000]	Free & Total Cl_2	N00-0012	D00-0007
1.00602Cl_2 [March 2000]	Total Cl_2	N00-0013	D00-0008
1.00598Cl_2 [March 2000]	Free Cl_2		D00-0009

We are pleased to inform you that AMS and OGWDW have determined that the above listed Merck Methods are equivalent to DPD colorimetric methods (corresponding to the above-listed analytes) specified at 40 *Code of Federal Regulations* (CFR) part 136 or part 141 (e.g., Standard Method 4500-Cl G), and that they may be used for National Pollutant Discharge Elimination System (NPDES) and/or National Primary Drinking Water Regulations (NPDWR) compliance monitoring. Both the approved and Merck methods rely on similar chemistry (reaction of oxidants with phenylenediamine compounds) to produce a red color; the intensity of which is: (1) dependent upon chlorine concentration and (2) determined photometrically.

We appreciate your interest in the development of environmental monitoring methods. If you have any questions regarding review of this ATP, please contact Khouane Ditthavong of

AMS (202/260-6115) or Herb Brass of OGWDW/TSC (513/569-7936) at your convenience.

Sincerely,

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

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

cc: USEPA Regional Administrators (all Regions)
Quality Assurance Managers (all Regions)
Water Management Division Directors (all Regions)
ATP Coordinators (all Regions)
Jim Sinclair, USEPA, TSC
James Westrick, USEPA, OGWDW
Maria Gomez-Taylor, USEPA, EAD
Khouane Ditthavong, USEPA, EAD
James Boiani, DynCorp I&ET, SCC