



Michael F. Easley
Governor

William G. Ross, Jr., Secretary
North Carolina Department of Environment and Natural Resources

Gregory J. Thorpe, Ph.D., Acting Director
Division of Water Quality

August 14, 2001

Dear NPDES Permittee:

This letter serves as notification to facilities with effluent permit limits for Total Residual Chlorine (TRC) that effective July 1, 2002, the Division of Water Quality expects these facilities to utilize an instrument or method that will detect and measure TRC concentrations to levels that are below the permit discharge requirements. Please note that if a facility has **no** effluent limit for TRC (just a monitoring requirement), then use of a hand-held meter, sometimes described as a pocket colorimeter, and the reporting of <100 ug/L as a TRC value is acceptable. The Environmental Protection Agency (EPA) and the State have determined that in the interest of overall program equity, to ensure water quality protection, and to comply with 15A NCAC 2B .0505(e)(4), the Division will require all facilities with TRC limits to utilize instruments or methods that will produce detection and reporting levels that are below the permit discharge requirements for TRC.

North Carolina has hundreds of NPDES permitted facilities that are required to limit the amount of TRC that is discharged from their effluent to the receiving waters of the State. Typically these limits are set at either 17 or 28 micrograms per liter (ug/L) of wastewater discharged. The EPA has approved two methods for low-level TRC analyses: the Amperometric Titration Method and the DPD Colorimetric Method. The Amperometric Titration Method is a classic chemistry analysis performed in a laboratory setting. Larger facilities with on-site laboratories frequently use this method and achieve reliable, low-level results of their testing. Many permitted facilities with TRC limits are small and/or have no on-site laboratory. Because TRC must be analyzed within 15 minutes of sample collection due to its volatile nature, these facilities are not able to send these samples out for analysis to a commercial lab. They must rely on a field technique, which will typically utilize the low-level DPD Colorimetric Method. There are portable instruments available that have the capability of analyzing TRC in the range of 10-15 ug/L.

The Division realizes that changing the method of TRC measurement will not be without difficulty on the part of the permittees. The permittees will have to evaluate and purchase or otherwise obtain access to instruments and become both educated and proficient in their use. Please be advised while these instruments are advertised as portable, permittees may have to prepare special on-site facilities to ensure their most reliable operation. For these reasons, permittees will not be required to use the more sensitive instruments until **July 1, 2002**.

If you have questions about the contents of this letter, please contact Vanessa Manuel at (919) 733-5083, extension 532. The Division of Water Quality thanks you for your cooperation and understanding in this matter.

Sincerely,

E. Shannon Langley, Supervisor
Point Source Compliance/Enforcement Unit

