Georgia Department of Natural Resources

Environmental Protection Division, Water Protection Branch 4220 International Parkway, Suite 101, Atlanta, Georgia 30354 Permitting, Compliance and Enforcement Program 404/362-2680

March 15, 2010

MEMORANDUM Linda MacGregor TO: **Jane Hendricks** FROM:

SUBJECT: Total Residual Chlorine (TRC) Strategy

In recent conversations, EPA Region IV has stated that Georgia is the only Region IV State that does not incorporate TRC limits for all NPDES permits that require disinfection. Georgia's current TRC Strategy requires effluent limitations in NPDES permits for major municipal facilities, major industrial facilities, minor municipal facilities that are new or proposing an expansion, and primary industrial and major federal facilities where there is reasonable potential to exceed the U.S. EPA's chronic TRC criterion of 11 ug/L in the receiving stream after dilution. The strategy is being revised to incorporate TRC limits into all minor municipal and privately owned facilities. The revised strategy will be implemented in future NPDES permits as they come up for reissuance.

We have revised our TRC strategy to address EPA's concerns and to ensure that chlorinated effluents do not result in toxic or potentially toxic concentrations of TRC in the receiving stream after dilution. This strategy is consistent with Georgia's narrative water quality standard in the Rules and Regulations for Water Quality Control, Chapter 391-3-6.03(5) and with 40 CFR Part 122.44(d)(1). Where there is reasonable potential to exceed 11 ug/L TRC in the receiving stream, the NPDES permit will be reissued with a numeric TRC maximum limit based upon the 11 ug/L TRC criterion, the 7Q10 of the receiving stream, and the facility permitted or average flow. If the calculated TRC limit is greater than 0.5 mg/L, the NPDES permit will be reissued with a technology-based effluent limit of 0.5 mg/L.

If a facility will not be able to immediately comply with the proposed TRC limit, a compliance schedule may be incorporated in the permit to allow up to 24 months for the permittee to achieve compliance with the TRC limits. This schedule will be comprised of 6 months for selection of an appropriate corrective action and 18 months for construction if needed. In some situations it may be appropriate to negotiate a schedule with a permit holder on a case-by-case basis which does not follow the prescribed schedule.

As with other parameters in Georgia's NPDES permits, the analytical method to be used to analyze for TRC will not be specified in the NPDES permit. The standard permit boilerplate language which references 40 CFR Part 136 requires the use of analytical methods sufficiently sensitive to demonstrate compliance with the permit's effluent limitations. If the water quality-based limit for TRC is less than 0.05 mg/L, the permit will require that the permittee utilize the appropriate analytical method in order to obtain a minimum detection level of 0.05 mg/L TRC.

We estimate that approximately 280 municipal and private facilities will be impacted by the revised TRC strategy. The technology to install a dechlorination system is not very complex nor expensive. However, due to a number of variable factors (i.e., facility design, size and location) it is difficult to determine the cost associated with installing a dechlorination system.

I recommend that Georgia implement the attached strategy. Upon your approval, we will transmit a copy of this memo to EPA Region IV and implement the strategy in NPDES permits as they come up for reissuance.