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June 19, 2003

TO: NPDES Unit Staff

FROM: David A. Goodrich *DA*  
NPDES Unit Supervisor

SUBJECT: Total Residual Chlorine Policy for NPDES permits

Every three years the State is required by the Clean Water Act to review its surface water quality standards and classifications, determine if changes are needed and to make any necessary changes. This review process is referred to as the "triennial review." Public hearings were held to solicit comments for the 2000-2003 Triennial Review of surface water quality standards during the summer of 2002. The Hearing Officer's recommendations were presented before the state's Environmental Management Commission on October 10, 2002.

The Hearing Officer's recommended changes included modifications to the existing standards for Arsenic, Cyanide, Methylene Blue Active Substances (MBAS) and Total Residual Chlorine (TRC). The Hearing Officer also recommended the addition of a standard for Methyl Tert-Butyl Ether (MTBE).

All of the Hearing Officer's proposed changes were adopted with the exception of MTBE. The changes took effect on April 1, 2003. This memo documents the changes to the NPDES permitting policy for TRC limits.

#### Total Residual Chlorine (TRC)

Previously, TRC had an Action Level Standard, except in designated Trout waters. The Triennial Review changes modified the TRC Action Level Standard to an Aquatic Life Standard of 17 µg/L. The Aquatic Life Standard will remain for designated Trout waters.

Aquatic Life Standard – 17 µg/L (freshwater only)

Trout Waters – 17 µg/L

#### Revised TRC Policy

- TRC limits will be assigned to permit renewals and all new permits issued after April 1, 2003.
- Facilities that do not use chlorine will not receive a TRC limit; however, the presence of a chlorine back-up system to augment UV or other disinfection requires a TRC limit.
- Facilities discharging to streams with a 7Q10 < 0.05 cfs (zero-flow streams) will receive a limit of 17 µg/L.
- Limits will be capped at 28 µg/L to protect against acute impacts.

It is likely that many facilities will need to add dechlorination (or use another means of disinfection) to comply with the new TRC standard. Therefore, a compliance schedule of 18 months from the effective date of the permit may be added to any TRC limit added during the current permit renewal. This time period is allowed in order for the facility to budget and design/construct the dechlorination and/or alternative disinfection system(s). The NPDES Unit has promulgated minimum design criteria in order to expedite permitting of dechlorination equipment.

cc: Coleen Sullins  
Regional Office Supervisors (Dechlorination guidance attached)  
Shannon Langley